The Implications of Long-COVID for Patients and the Health Care System

Brett P. Giroir, MD
Distinguished Executive, Leavitt Partners,
Former Assistant Secretary for Health,
Member of the White House Coronavirus Task Force,
and Admiral, US Public Health Service

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The COVID Patient Recovery Alliance is a multi-sector collaboration, formed in the fall of 2020, with the mission of supporting the energy and innovation of government and private-sector leaders as they care for individuals with long-COVID.

The Alliance is especially interested in understanding the needs and potential gaps in care for individuals with long-COVID who may have served their communities as frontline essential workers, individuals who come from underserved communities already facing disparities and inequities and individuals who experience unique challenges in accessing care.
COVID Patient Recovery Alliance

COVID19PatientRecovery.org

• 2021 Interim Report
• Focus populations
• Alliance approaches to solutions
• Up-to-date information on activities, including data findings and policy positions
• Catalogue of long-COVID research and news articles
• Backgrounders on long-COVID and return to work, variants, vaccines, and healthcare coverage
• Current membership
• Membership inquiries

Alliance Partners

• AAPCHO
• Allscripts
• Ambitna
• American Heart Association
• Arcadia
• Atrium Health
• ChenMed
• Duke Clinical Research Institute
• Health Catalyst
• Health Rosetta
• HCA Healthcare
• Intermountain Healthcare
• Johns Hopkins
• MedStar Health
• Mount Sinai Health System
• New York-Presbyterian
• One Call
• Survivor Corps
• University Hospitals
In September 2020, the Alliance released its interim report which outlines more than two dozen recommendations and actionable steps Congress/Administration can take to employer the health care sector to provide comprehensive, quality care for those with long-COVID.

The recommendations are organized into two domains of focus: models of care and payment systems and focus on:

- Supporting the important role of primary care and other providers,
- Optimizing care for the underserved,
- Promoting ongoing research and education,
- Supporting analysis of health care coverage sources,
- Paying for high-value care delivery, and
- Leveraging tools and authorities of HHS
Towards Recovery and Restoration

Models of Care
• Objective: To inform the development of care models to optimize the use of resources and improve the care of individuals with long-COVID based on evidence, best practices, and individuals’ needs and characteristics.
• We have identified specific federal policies that would support the adoption of models of care that ensure individuals with long-COVID – especially those who are underserved or are already facing disparities and inequities – receive quality care.

Payment Systems
• Objective: To inform the development of payment strategies, tools, and policies to ensure individuals with long-COVID receive adequate care and support based on evidence, best practices, and individuals’ needs and characteristics.
• We have identified federal policies based on specific opportunities or gaps in current payment approaches to ensure individuals with long-COVID receive adequate care.

COVID19PatientRecovery.org
### Summary of Interim Policy Recommendations (1 of 2)

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<thead>
<tr>
<th>Domain</th>
<th>Policy Recommendation</th>
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<tbody>
<tr>
<td>1. Ensure Optimized Care for the Underserved</td>
<td>A. Fund Grants to Federally Qualified Health Centers</td>
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<td>B. Fund Grants to Primary Care Practices</td>
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<td>C. Create Primary Care Technical Assistance Program</td>
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<td>D. Implement Grants for Community Screening</td>
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<td>E. Support Community Mental Health</td>
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<td>F. Fund Mental Health and Suicide Prevention</td>
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| 2. Support Sources of Coverage Analysis      | A. National Survey on Long-COVID                                                      |

| 3. Promote Ongoing Research and Education    | A. Create Data Standards                                                              |
|                                             | B. Form Interagency Taskforce                                                         |
|                                             | C. Create a Long-COVID Education Website                                              |
|                                             | D. Promote Evidence-Based Strategies for High-Value Care                               |
|                                             | E. Support Long-COVID Registries                                                     |
|                                             | F. Evaluate Disparities in Long-COVID                                                 |
|                                             | G. Support Return to Work                                                             |
|                                             | H. Support Public Awareness Campaigns                                                |
|                                             | I. Grants for Pediatric Research on Long-COVID                                        |
### Summary of Interim Policy Recommendations (2 of 2)

#### Payment Systems

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| 1. Leverage Centers for Medicare & Medicaid Services Tools | A. Improve Medicare Advantage Chronic Special Needs Plans  
B. Create Medicaid Health Homes through Legislation  
C. Issue State Medicaid Director Letter  
D. Support Provider Collection of Long-COVID Data  
E. Reinstant Code G2211 in Medicare Fee-for-Service for Individuals with Long-COVID |
| 2. Pay for High-Value Care Delivery | A. Create CMMI Long-COVID Demonstration Project  
B. Fund Grants for “Mini-Framingham” Cohort Studies  
C. Report on Health Care Spending  
D. Support Quality Measure Development |
What is the role of COVID-19 vaccination in the prevention or treatment of long-COVID?
COVID Vaccination and Long-COVID: Published Studies
Antonelli et. al, Lancet Infectious Diseases 2021

- Nested control study in UK with >1.24 million COVID-19 Symptom Study app
- Fully vaccinated people are 49% less likely to experience long-COVID symptoms than those who were unvaccinated

Figure shows disease severity and duration factors in SARS-CoV-2-infected vaccinated versus unvaccinated individuals.
COVID Vaccination and Long-COVID: Published Studies
Tran et. al, Lancet Pre-print Server Posted: 29 Sep 2021

- Emulated clinical trial using existing French COVID-19 e-Cohort: 455 vaccinated and 455 unvaccinated patients with long-COVID
- Vaccination of patients with diagnosis of long-COVID improve rates of remission
- Vaccinations were at least 3 months after first COVID-10 symptoms/diagnosis
Testing Hypotheses Using Massive Database

Arcadia Data Research (Arcadia.io)

• **Asset:** a normalized, de-identified clinical and operational dataset containing over 150 million patient records composed of data from electronic health record (EHR) systems, practice management systems, health care payer claims and eligibility data, care management and clinical assessment data, and other third-party sources.

• **Research data sample:** covers one year’s worth of COVID-19 activity in the United States, about six months of vaccination activity, and a consistent snapshot of the pandemic prior to the emergence of the delta variant (B 1.617.2) as the predominant variant in the United States at the end of June 2021

• **Research approach:** a retrospective analysis of the medical history of 240,648 COVID-19-infected persons to identity factors influencing the development and progression of long-COVID, including COVID-19 vaccination before or after COVID-19 diagnosis