

# Approaches to long COVID care: the Veterans Health Administration experience in 2021

Allison M Gustavson <sup>1,2</sup> T L Eaton <sup>3,4</sup> R M Schapira, <sup>5,6</sup>  
T J Iwashyna, <sup>7,8</sup> M Adly, <sup>9,10</sup> A Purnell<sup>9</sup>

Long COVID has challenged healthcare systems to organise care for a large group of complex patients at scale. Yet, despite these problems, the evidence base for long COVID care remains scant, with little criteria-standard, evidence-based practices to solve these problems. Therefore, we characterise how each facility within the large, multifacility Veterans Health Administration (VHA) healthcare system, one of the largest integrated healthcare systems in the USA serving over nine million veterans, approached the development, staffing and referral patterns of long COVID programmes.

This project integrates two workstreams for information: (1) the Long COVID Environmental Scan and (2) the VHA Long COVID Learning Collaborative. The Long COVID Environmental Scan was developed from engagement with VHA subject matter experts and review of Centers for Disease Control and Prevention (CDC) documentation and additional authoritative guidance. Initiated through the Veterans Affairs (VA) Office of Innovation and Discovery, the 41-question survey focused on the use of clinical criteria, patient symptom screening, clinical screens used, and resources and

staffing. Established in May 2021, the Long COVID Learning Collaborative was created through a grassroots effort of VHA facilities connecting with other

facilities. The collaborative sought to articulate elements critical to long COVID care based on individuals' and individual facility's experience, while allowing flexibility in how they enact each element.

The results are illustrated in [Table 1](#) and [Figure 1](#), with key findings detailed in the following:

- ▶ Of 139 VHA facilities, 119 (86%) responded to the Long COVID Environmental Scan. Located in 10 VHA regions, 16 facilities reported established programmes.
- ▶ Of the 103 who did not currently have a long COVID-specific programme, 26

**Table 1** Participating programmes within the VHA healthcare system

Facility	Provider specialty	Available staff	Physical location	Location	VHA region
Amarillo VA Healthcare System	▶ Primary care.	▶ Primary care.	Housed in a formal clinic.	Amarillo, Texas	17
Iowa City VA Healthcare System	▶ Referring physician.	▶ Primary care. ▶ Pulmonary staff. ▶ Mental health staff. ▶ PT/OT staff.	Housed in a formal clinic.	Iowa City, Iowa	23
James A Haley Veterans Hospital	▶ Primary care. ▶ Psychiatrist.	▶ Mental health staff. ▶ PT/OT staff.	Housed in a formal clinic.	Tampa, Florida	8
Jesse Brown VA Medical Center	▶ Not indicated in the survey.	▶ Pulmonary staff.	Housed in a formal clinic.	Chicago, Illinois	12
Miami VA Healthcare System	▶ General internist.	▶ Primary care. ▶ Pulmonary staff. ▶ PMR staff. ▶ PT/OT staff.	Housed in a formal clinic.	Miami, Florida	8
Michael E DeBakey VA Medical Center	▶ Pulmonary. ▶ Infectious disease.	▶ Pulmonary staff. ▶ PMR staff. ▶ Mental health staff. ▶ PT/OT staff.	Housed in a formal clinic.	Houston, Texas	16
Phoenix VA Healthcare System	▶ Primary care. ▶ Psychiatrist.	▶ PMR staff. ▶ PT/OT staff.	Not housed in a formal clinic.	Phoenix, Arizona	22
San Francisco VA Healthcare System	▶ ANP or MD.	▶ Primary care. ▶ Pulmonary staff. ▶ Mental health staff. ▶ PT/OT staff.	Housed in a formal clinic.	San Francisco, California	21
South Texas Veterans Health Care System	▶ NP or MD.	▶ Primary care. ▶ Pulmonary staff. ▶ PMR staff. ▶ Mental health staff. ▶ PT/OT staff.	Housed in a formal clinic.	San Antonio, Texas	17
VA Greater Los Angeles Healthcare System	▶ Not indicated in the survey.	▶ PMR staff. ▶ PT/OT staff.	Housed in a formal clinic.	Los Angeles, California	22
VA Puget Sound Health Care System	▶ Not indicated in the survey.	▶ PMR staff. ▶ Mental health staff.	Not housed in a formal clinic.	Seattle, Washington	20
VA Salt Lake City Healthcare System	▶ Primary care.	▶ Primary care. ▶ Mental health staff. ▶ PT/OT staff.	Housed in a formal clinic.	Salt Lake City, Utah	19
VA Southern Nevada Healthcare System	▶ Infectious disease. ▶ Pulmonary.	▶ Pulmonary staff.	Housed in a formal clinic.	North Las Vegas, Nevada	21
VA Western Colorado Health Care System	▶ PT/OT/ST.	▶ Not indicated in survey results.	Not housed in a formal clinic.	Grand Junction, Colorado	19
Washington DC VA Medical Center	▶ Rehabilitation. ▶ Pulmonary.	▶ Pulmonary staff. ▶ PMR staff. ▶ PT/OT staff.	Housed in a formal clinic.	Washington, DC	5
William S Middleton Memorial Veterans Hospital	▶ APNP.	▶ Primary care. ▶ Pulmonary staff. ▶ PMR staff. ▶ PT/OT staff.	Housed in a formal clinic.	Madison, Wisconsin	12

ANP, Advanced Practice Nurse; APNP, Advanced Practice Nurse Prescriber; MD, Medical Doctor; NP, Nurse Practitioner; OT, Occupational Therapist; PMR, Physical Medicine and Rehabilitation; PT, Physical Therapist; ST, Speech Therapist; VA, Veterans Affairs; VHA, Veterans Health Administration.

<sup>1</sup>VA Health Services Research and Development, Center for Care Delivery and Outcomes Research, Minneapolis, Minnesota, USA

<sup>2</sup>Department of Medicine, Division of General Internal Medicine, University of Minnesota System, Minneapolis, Minnesota, USA

<sup>3</sup>Institute for Healthcare Policy and Innovation, University of Michigan, Ann Arbor, Michigan, USA

<sup>4</sup>School of Nursing, University of Michigan, Ann Arbor, MI, USA

<sup>5</sup>Research Service, New Orleans VA Medical Center, New Orleans, Louisiana, USA

<sup>6</sup>Department of Internal Medicine, Tulane University School of Medicine, New Orleans, Louisiana, USA

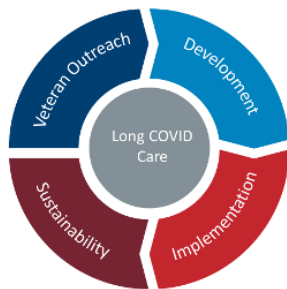
<sup>7</sup>Department of Medicine, Division of Pulmonary and Critical Care, University of Michigan Michigan Medicine, Ann Arbor, Michigan, USA

<sup>8</sup>Veterans Affairs Center for Clinical Management Research, Ann Arbor, Michigan, USA

<sup>9</sup>Central Office, US Department of Veterans Affairs, Washington, DC, USA

<sup>10</sup>Office of the Chief Technology Officer, US Department of Veterans Affairs, Washington, DC, USA

**Correspondence to** Dr T L Eaton, Institute for Healthcare Policy & Innovation, University of Michigan, Ann Arbor, Michigan, USA; [tameat@med.umich.edu](mailto:tameat@med.umich.edu)



- Identify who should be screened and screening assessment
  - Develop a process for outreach and screening
  - Determine criteria for referral
  - Understand Veteran perspectives for receiving this care
- Assemble a multidisciplinary team
    - Determine clinic capacity and establish scheduling grids
  - Increase awareness of long COVID clinic or care
  - Develop referral process to long COVID care
  - Create clinical note templates and consults
  - Determine frequency and criteria for
    - Follow-ups
    - Discharge
    - Transition to primary care
  - Determine best practices for clinical intervention
  - Determine how services will be delivered
    - Telehealth vs in-person vs hybrid
- Measure outcomes
    - Understand structural elements influencing care
    - Map out processes for encounters
    - Identify Veteran, provider, and system-level effects
  - Enroll in or develop pipeline into clinical trials
    - Identify resource gaps to support operations
- Evaluate outreach approach
  - Develop process for ongoing outreach and engagement
  - Evaluate Veteran, provider, and system-level outcomes

**Figure 1** Stakeholder-driven development of a roadmap consisting of domains and guidance essential to successful creation and sustainability of long COVID programmes. VA, Veterans Affairs.

reported that they were considering a programme and 77 were not. Of the 77 not considering a programme, 67 reported plans to use existing primary care structures, including patient-aligned care teams.

- ▶ As of 18 December 2021, the VHA Long COVID Learning Collaborative has 125 members, representing 29 VA facilities engaged in its electronic platform.
- ▶ Early clinical topics focused on sharing approaches to issues such as fatigue, brain fog and olfactory dysfunction. Prominently featured were concerns about how to integrate with other, more established VA programmes, such as mental health, the VA's Whole Health (including complementary medicine), diagnostic coding, vaccination programmes and qualifying for disability benefits.

Given the magnitude of the pandemic, providing high-quality and effective long COVID care represents a significant and looming challenge for healthcare

systems. These data suggest that even well-resourced healthcare systems such as the VHA are grappling with how to best address the next pandemic-related crisis: long COVID care. Emerging literature describes models of long COVID care across multiple healthcare systems, which is a valuable starting point for developing, standardising, implementing and evaluating long COVID care programmes.<sup>1-3</sup> However, there is no real guidance on how to create a standardised or adaptive infrastructure for long COVID. This long COVID initiative has the potential to empower system-wide change that successfully engages and meets the changing needs of veterans, healthcare and communities over time.

**Twitter** Allison M Gustavson @MPLS\_CCDOR and T L Eaton @tammyeaton17

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#### ORCID iDs

Allison M Gustavson <http://orcid.org/0000-0002-6401-1230>

T L Eaton <http://orcid.org/0000-0002-0348-0527>

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