

“Long COVID,” Bodily Systems as ADAAA Major Life Activities, and the Social Model of Disability

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I. INTRODUCTION

COVID-19 has brought with it an unwelcome accompaniment: “long COVID.” Long COVID is a complex range of symptoms experienced by some patients after even very mild COVID-19 infections.¹ Difficult to diagnose, long COVID already has resulted in claims of disability-related employment discrimination. Some plaintiffs have prevailed in their claims while others appear to have failed. This article addresses a potentially problematic contribution to these failures: a misalignment between how some courts understand actual disability for purposes of disability anti-discrimination law and how long COVID is medically diagnosed. Without physiologically observed biomarkers of long COVID that can be used to confirm the diagnosis, some disability claimants have not been considered sufficiently disabled to warrant disability rights protection.² We call this the *physical reductionism* of disability determinations. Such physical reductionism, we contend, misunderstands the relationship between disability, bodily function, and disability anti-discrimination law.

Our argument can be summarized as follows. Part II describes how many medical conditions have ambiguous or contested diagnoses but nevertheless could be recognized as disabilities and thus protected under anti-discrimination law. These are conditions for which diagnosis is based on a range of reported symptoms but without confirming biomarkers and in the absence of definitive alternative diagnoses. In other words, no definitive physiological tests such as biopsies identify

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¹ *A Clinical Case Definition of Post COVID-19 Conditions by a Delphi Consensus*, WORLD HEALTH ORG., (Oct. 6, 2021) at 2.

² See discussion *infra* Part IV.

the condition, although physiological tests may be used to rule out conditions by enabling a different diagnosis. Conditions such as fibromyalgia, chronic fatigue syndrome, depression, post-traumatic stress disorder (PTSD), post-concussive syndrome (PCS)³ or adult attention-deficit/hyperactivity disorder (ADHD) are all ambiguous diagnoses in this sense. Long COVID is also appearing as a condition that is ambiguously diagnosed. Part III presents one provision of the Americans with Disabilities Amendments Act of 2008 (ADAAA),⁴ the inclusion of bodily system function as a major life activity, that has contributed to problematic physical reductionism in disability determinations. Although the ADAAA was intended to extend the range of people considered to be disabled for purposes of disability anti-discrimination law, ironically and unintentionally, the provision seems to have instead encouraged physical reductionism in disability determinations. In Part IV, we describe how this reductionism has functioned in the case law when plaintiffs contend they are disabled because of a substantial limit in the function of a bodily system. Part V documents initial signs of such reductionism in the treatment of long COVID in federal agency documents. Part VI reveals reductionism in the limited initial case law regarding COVID and long COVID. We conclude by suggesting how social understandings of the body and disability, congruent with the ADAAA, ought to counter misleading reductionism about ambiguously diagnosed conditions as disabilities, including long COVID.

An important caution to this discussion is that knowledge about and experiences with long COVID are just in their initial stages and are continuing to evolve and change. In February 2021, the National Institutes of Health (NIH) announced the contours of a \$1.5 billion effort to study the long-term effects of COVID-19 infection.⁵ The initial NIH listening session for this “Researching COVID to Enhance Recovery” (RECOVER) initiative described plans to establish a diverse patient cohort to understand the symptoms and any possible biological underpinnings of long COVID.⁶ Much is still to be learned about long COVID, its diagnosis, and its course; these uncertainties must be kept in mind as claims of disability discrimination based on long COVID appear.

³ See Randolph W. Evans, *Postconcussion Syndrome*, UPTODATE (Mar. 2022), <https://www.uptodate.com/contents/postconcussion-syndrome> [<https://perma.cc/E662-4XZ2>].

⁴ ADA Amendments Act of 2008, Pub. L. No. 110-325, 122 Stat. 3553 (2008). These claims could conceivably also be determined under the Rehabilitation Act for those plaintiffs seeking redress for disability discrimination by recipients of federal funding. For the sake of clarity and convenience, we limit our arguments to the ADAAA.

⁵ Francis S. Collins, *NIH Launches New Initiative to Study “Long COVID”*, NAT’L INSTS. OF HEALTH (Feb. 23, 2021), <https://www.nih.gov/about-nih/who-we-are/nih-director/statements/nih-launches-new-initiative-study-long-covid> [<https://perma.cc/83VA-4PWW>].

⁶ Amy Patterson et al., *NIH RECOVER Listening Session – June 2021*, NAT’L INSTS. OF HEALTH (June 2, 2021), <https://videocast.nih.gov/watch=42174> [<https://perma.cc/UNY3-FEP7>].

II. AMBIGUOUS DIAGNOSES AND LONG COVID

This Part begins with an account of ambiguous diagnoses. It gives brief descriptions of conditions with ambiguous diagnoses such as fibromyalgia or PTSD. We then explain what was known at the outset of 2022 about long COVID and whether it is a condition with an ambiguous diagnosis.

A. Ambiguous Diagnoses

Ambiguous diagnoses rely on reported or observed symptoms rather than on laboratory-confirmed measures such as serum creatinine, a measure of renal function.⁷ For conditions with ambiguous diagnoses, there are no definitive physiological measures such as would be obtained by a blood test or a biopsy. These diagnoses may involve a constellation of symptoms, some but not all of which must be present for the diagnosis to be made. There also may be changes in the symptoms that are regarded as components of the diagnosis. Diagnoses for such conditions may be based on ruling out other possible causes for the patient's symptoms, and they are likely to be contested.⁸ For conditions with ambiguous diagnoses, physical reductionism—the insistence on physiological measures for diagnosis—is likely to result in misdiagnosis or the failure to diagnose at all. Patients may be told that they are just imagining their symptoms or be given an erroneous mental health diagnosis such as depression.

Examples of conditions with ambiguous diagnoses include fibromyalgia, chronic fatigue syndrome, depression, PTSD, PCS, and ADHD. For example, a diagnosis of fibromyalgia may be based on multiple points of pain throughout the body, fatigue, poor sleep, and mood problems.⁹ Chronic fatigue syndrome diagnoses may be based on debilitating and unrelieved fatigue lasting longer than six months, together with symptoms such as impaired memory or new headaches.¹⁰ Even the rec-

⁷ *Symptoms and Diagnosis of ADHD*, CTR. FOR DISEASE CONTROL & PREVENTION (Sept. 28, 2021) <https://www.cdc.gov/ncbddd/adhd/diagnosis.html> [<https://perma.cc/4D5K-AMXV>].

⁸ *E.g.*, Abigail S. Dumas, *What Long Covid Tells Us About the Limits of Medicine*, NY TIMES (March 17, 2022), <https://www.nytimes.com/2022/03/17/opinion/long-covid.html> [<https://perma.cc/SEH2-TB82>]; Massimo E. Maffei, *Fibromyalgia: Recent Advances in Diagnosis, Classification, Pharmacotherapy and Alternative Remedies*, 21 INT'L J. MOLECULAR SCI. 7877 (2020).

⁹ *Fibromyalgia: Understand How It's Diagnosed*, MAYO CLINIC (Sept. 18, 2020), <https://www.mayoclinic.org/diseases-conditions/fibromyalgia/in-depth/fibromyalgia-symptoms/art-20045401> [<https://perma.cc/8NTK-K4WY>].

¹⁰ INST. OF MED. OF THE NAT'L ACADS., BEYOND MYALGIC ENCEPHALOMYELITIS/CHRONIC FATIGUE SYNDROME: REDEFINING AN ILLNESS 87 (2015); Joseph R. Yancey & Sarah M. Thomas, *Chronic Fatigue Syndrome: Diagnosis and Treatment*, 86 AM. FAM. PHYSICIANS 741 (Oct. 15, 2012).

ommended name for this condition has been changing, from chronic fatigue syndrome to the medical-sounding “myalgic encephalomyelitis” (*my* meaning muscle, *algic* meaning pain, *encephalo* meaning brain, *myel* meaning spinal cord and brain stem, and *itis* meaning inflammation)¹¹ to “systemic exertion intolerance disease.”¹² Criteria for PTSD diagnoses have likewise shifted over time.¹³ To take another condition, ADHD is described by the Mayo Clinic as including “a combination of persistent problems” including difficulty paying attention and impulsive behavior.¹⁴

For conditions with ambiguous diagnoses, patients frequently report long struggles to have their conditions recognized or identified. They describe encounters with health care providers who try to convince them that their conditions are largely unreal or due to anxiety or stress.¹⁵ Patient reports of symptoms, moreover, may be discounted, misunderstood, or regarded as imagined—a phenomena recently referred to as medical gaslighting.¹⁶ Women especially report these experiences of mal-response. The possibility of epistemic injustice in provider-patient encounters is increasingly recognized.¹⁷ For example, testimonial injustice occurs when patients’ statements are not believed when they are identified with a disfavored group. Emphasis on evidence-based practices (EBP) may exacerbate the division between patient reports and clinical recognition, as EBP prioritizes knowledge obtained through clinical testing at the cost of devaluing patients’ first-personal stories.¹⁸

¹¹ Adrienne Dellwo, *Myalgic Encephalomyelitis or Chronic Fatigue Syndrome*, VERYWELL HEALTH (Nov. 18, 2020), <https://www.verywellhealth.com/myalgic-encephalomyelitis-me-715663> [<https://perma.cc/N9Z3-9GKQ>].

¹² INST. OF MED., *supra* note 10, at 11.

¹³ Carol S. North et al., *The Evolution of PTSD Criteria Across Editions of DSM*, 28 ANNALS CLINICAL PSYCHIATRY 197 (Aug. 2016) (documenting ambiguities and inconsistencies in diagnostic criteria for PTSD).

¹⁴ *Adult Attention-Deficit/Hyperactivity Disorder (ADHD)*, MAYO CLINIC (June 22, 2019) <https://www.mayoclinic.org/diseases-conditions/adult-adhd/symptoms-causes/syc-20350878> [<https://perma.cc/7FSL-36HV>].

¹⁵ *E.g.*, INST. OF MED., *supra* note 10, at 30; *see also* Olga Khazan, *The Tragic Neglect of Chronic Fatigue Syndrome*, ATLANTIC (Oct. 8, 2015), <https://www.theatlantic.com/health/archive/2015/10/chronic-fatigue-patients-push-for-an-elusive-cure/409534/> [<https://perma.cc/84PG-RD38>].

¹⁶ Melinda Wenner Moyer, *Women Are Calling Out ‘Medical Gaslighting’*, NY TIMES (Mar. 28, 2022), <https://www.nytimes.com/2022/03/28/well/live/gaslighting-doctors-patients-health.html> [<https://perma.cc/H29H-9RSR>].

¹⁷ *See generally* Ian James Kidd & Havi Carel, *Epistemic Injustice and Illness*, 34 J. APPLIED PHIL. 172 (2017); Havi Carel & Ian James Kidd, *Epistemic Injustice in Healthcare: A Philosophical Analysis*, 17 MED. HEALTH CARE & PHIL. 529 (2014).

¹⁸ Kristen Margrethe Heggen & Henrik Berg, *Epistemic Injustice in the Age of Evidence-Based Practice: The Case of Fibromyalgia*, 8 NATURE HUM. & SOC. SCI. COMM’NS 235, 240 (2021).

Insistence on physiological measures as critical to diagnoses may distort ambiguous diagnoses in two directions. If physiological criteria are thought necessary for diagnosis, people will be judged not to have the condition in the absence of the relevant physiological measures. People claiming that they are disabled by the disorder will thus not be able to claim an actual disability, since they have not been judged to have the disorder.¹⁹ Instead, they at most will be able to claim that they have been “regarded as” disabled, a category that will not entitle them to accommodations under the ADA.²⁰

On the other side, if only physiological criteria are believed sufficient for diagnosis, what it is to have the condition may be thought of primarily in terms of the physiological malfunction, thereby ignoring the experiences of the patient with the malfunction. How the condition affects a major life activity will be understood in terms of the empirically verifiable physiological malfunction, rather than through patients’ interactions with and in the world.²¹ The resulting need for accommodation may also be limited to addressing the physiological malfunction rather than other aspects of the patient’s experiences and abilities. We develop these points later in this article.²²

B. Long COVID

As the COVID-19 pandemic continues in its third year, its aftermath for patients is increasingly apparent. Estimates now are that upwards of 10 percent and perhaps as many as 30 percent of patients who have had even mild cases of COVID will experience a range of new, re-appearing, or exacerbated health problems.²³ These health problems may be the aftereffects of a serious illness or ICU stay, such as muscle weakness or post-traumatic stress. They may be the result of tissue damage caused by the COVID-19 inflammation, such as shortness of breath due to lung damage. They may involve the exacerbation of existing illness such as diabetes or heart disease. “Brain fog” and difficulty in concentrating also are frequently reported. In addition, ongoing symptoms such as cough may be the continuation of the COVID-19 infection itself.

¹⁹ See discussion *infra* Part IV.B

²⁰ 42 U.S.C. § 12201(h).

²¹ See discussion *infra* Part IV.B.

²² See discussion *infra* Part IV.B.

²³ See Sara Berg, *What Doctors Wish Patients Knew About Long COVID*, AM. MED. ASS’N (Oct. 22, 2021), <https://www.ama-assn.org/delivering-care/public-health/what-doctors-wish-patients-knew-about-long-covid> [<https://perma.cc/L4GT-WYMW>].

As of early 2022, clinical diagnostic criteria for long COVID remained unsettled. Patients report extended times of recovery and multiple symptoms across different organ systems.²⁴ Typical symptoms include fatigue and cognitive dysfunction. This state of affairs has caused problems for people claiming disability due to long COVID. Insistence on physiological criteria for the diagnosis may impair individuals from qualifying for benefits such as Social Security disability.²⁵ *Matias v. Terrapin House, Inc.*²⁶ and *Alvarado v. ValCap Group*,²⁷ which we discuss further below, exemplify how unsettled diagnostic criteria create barriers to disability rights claims for long COVID by invoking physical reductionism. The next Part of this Article outlines the addition of major bodily system dysfunction to the definition of major life activity in the ADA and how this addition may have contributed to physical reductionism in disability determinations.

III. THE ADA AND THE DEFINITION OF DISABILITY

The ADA, as amended by the ADA Amendments Act of 2008, prohibits certain forms of discrimination on the basis of disability in order to ensure that people with disabilities are not diminished in the “right to fully participate in all aspects of society.”²⁸ The ADA Amendments Act was enacted in 2008 to counter a series of Supreme Court decisions that had radically reduced the ADA’s coverage.²⁹ The Court had constricted the scope to people who, even with medical treatment, faced profound inabilities to engage in basic activities of daily living. Etta Williams, for example, found that her carpal tunnel syndrome could not qualify her as disabled despite her inability to perform a range of manual tasks, including those related to her employment assembling automobiles.³⁰ Instead, she would have “to a

²⁴ Hannah E. Davis et al., *Characterizing Long COVID in an International Cohort: 7 Months of Symptoms and Their Impact*, 38 *ECLINICAL MED.* 101019, 8, 12 (2021).

²⁵ For example, a New York Times story describes how Josie Cabrera Taveras has been turned down for disability benefits twice without “direct medical evidence of her condition” when scans did not show COVID-related tissue damage despite clinic notes about her symptoms. Amanda Morris, *Another Struggle for Long Covid Patients: Disability Benefits*, *NY TIMES* (Oct. 27, 2021), <https://www.nytimes.com/2021/10/27/us/long-covid-disability-benefits.html> [<https://perma.cc/EM76-KB92>]; see also Lydia Wheeler, *Long Covid’s Catch-22: Too Sick to Work, Yet Not Quite Disabled*, *BLOOMBERG LAW* (Nov. 18, 2021), <https://news.bloomberglaw.com/health-law-and-business/long-covids-catch-22-too-sick-to-work-yet-not-quite-disabled> [<https://perma.cc/XZ6X-36LU>].

²⁶ No. 5:21-CV-02288, 2021 WL 4206759, at *1 (E.D. Pa. Sept. 16, 2021).

²⁷ No. 3:21-CV-1830-D, 2022 WL 19686, at *1 (N.D. Tex. Jan. 3, 2022).

²⁸ 42 U.S.C. § 12101 note (a)(2).

²⁹ 154 CONG. REC. S8840 (daily ed. Sept. 16, 2008) (Senate Statement of Managers).

³⁰ *Toyota Motor Mfg. v. Williams*, 534 U.S. 184, 192 (2002) (holding that an impairment is not a disability unless it impedes performance of a range of tasks central to daily living for most people).

large degree” be unable to perform “activities that are of central importance to daily life.”³¹

In responding to *Williams* and other decisions³² sharply curtailing the ADA’s intended understanding of disability, Congress did not change the statutory definition of disability itself. That definition remained three-pronged. To be disabled for purposes of being considered subject to discrimination on the basis of disability, individuals must qualify under one of these three prongs: (1) have a physical or mental impairment that substantially limits one or more life activities, (2) have a record of such an impairment, or (3) be regarded as having such an impairment.³³

Rather than changing this three-pronged disability definition, the ADA amendments were designed to affect the definition’s implementation. In the explanation of the ADA’s Senate managers, the 2008 amendments were designed to expand the scope of persons who could qualify as disabled while maintaining “the ADA’s inherently functional definition of disability as a physical or mental impairment that substantially limits one or more life activities”³⁴ The basic change was interpretive and made overtly as a counter to the prevailing and cramped interpretations of the Supreme Court and federal courts. The ADA thus stated specifically that the definition of disability was to be construed “in favor of broad coverage of individuals . . . to the maximum extent permitted by the terms of this chapter.”³⁵

This rule of construction applies to all three prongs of the disability definition: actual disability, record of a disability, and regarded as disabled.³⁶ There are three elements to actual disability, and the rule of construction applied to each of these: a “physical or mental impairment” that “substantially limits” a “major life activity.” In the ADA, the understanding of “major life activities” was further expanded with two lists. The subsection (A) list of major life activities was made up of daily doings that “include, but are not limited to, caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working.”³⁷ The Senate managers described this “illustrative list” as included for clarity and by no means

³¹ *Id.* at 197.

³² *Albertson’s, Inc. v. Kirkingburg*, 527 U.S. 555 (1999) (holding that disability determinations must be made case-by-case); *Sutton v. United Air Lines, Inc.*, 527 U.S. 471 (1999) (holding that for a determination of disability, individuals should be assessed in their mitigated states).

³³ 42 U.S.C. § 12102(1).

³⁴ 154 CONG. REC. S8344 (daily ed. Sept. 11, 2008).

³⁵ 42 U.S.C. § 12102(4)(A).

³⁶ 42 U.S.C. § 12102(4).

³⁷ 42 U.S.C. § 12102(2)(A).

comprehensive.³⁸ The subsection (B) list consisted of “the operation of a major bodily function, including but not limited to, functions of the immune system, normal cell growth, digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions.”³⁹ This addition was made for “better addressing chronic impairments that can be substantially limiting.”⁴⁰

Importantly for the points we make in what follows about physical reductionism, the subsection (A) list describes many activities that people *do* while interacting with the world: ambulating in their environment, picking things up, becoming educated, communicating what they are thinking, or performing their jobs. The subsection (B) list describes physiological processes and invites medical evidence about them. The introduction of these two separate lists foreshadows at least two potential problems for the understanding of what plaintiffs claiming actual disability must show. First, a list of bodily processes suggests the need for medical evidence in proof of disability. Second, there is a risk that the addition of the (B) list will be taken to suggest a central role for physiological measures in the determination of a major life activities on the (A) list. Both problems may confront plaintiffs claiming disability based on conditions with ambiguous diagnoses, as we detail in the next Part.

Two other final changes of great importance enacted in the ADAAA addressed the third, “regarded as,” prong of the definition of disability. First, individuals cannot qualify as regarded as disabled for transitory and minor impairments lasting six months or less.⁴¹ Hence, people with COVID that resolves quickly will not qualify as disabled under this prong, but people with long COVID might so qualify. The ADAAA Senate managers explained this temporal provision as being important to employers and as “reasonable” because “individuals seeking coverage under this prong need to meet the functional limitation requirement contained in the first two prongs of the definition,” that is, actual disability or a record of disability.⁴² Second, people qualifying for statutory protection under the regarded as prong for disability were not entitled to accommodations under the ADAAA.⁴³ Senate managers explained this provision, which resolved conflicting holdings under the ADA, as “an acceptable compromise” given the “strong expectation that such individuals would now be covered under the first prong of the definition,

³⁸ 154 CONG. REC. S8346 (daily ed. Sept. 11, 2008).

³⁹ 42 U.S.C. § 12102(2)(B).

⁴⁰ 154 CONG. REC. S8346 (daily ed. Sept. 11, 2008).

⁴¹ 42 U.S.C. § 12102(3)(B).

⁴² 154 CONG. REC. S8346 (daily ed. Sept 11, 2008).

⁴³ 42 U.S.C. § 12201(h).

properly applied.”⁴⁴ The reasoning was that with the expanded interpretation of actual disability, people with accommodation needs would be covered. People who were only “regarded as” disabled and treated adversely as a result would not require accommodations, because they would not be actually disabled. This reasoning assumes, however, that people needing accommodations will be able to qualify under the first prong of the disability definition. Yet a gap may remain: if individuals fail to qualify as actually disabled but have conditions that affect their ability to function at work, they may still need accommodations, such as flexible hours, but will be unable to claim rights to them.

Under these statutory provisions, individuals with COVID-19 may be at risk of falling into several coverage gaps. Individuals who experience comparatively mild initial COVID-19 infections will be unable to claim actual disability and associated accommodation rights if they cannot show substantial limitation in a major life activity broadly construed. If they have lingering symptoms, they may need accommodations such as intermittent leave, adjusted job responsibilities, or flexible schedules but will not have a right to them without being able to show actual disability. They might try to turn to a diagnosis of long COVID as a condition that substantially limits a major life activity, but then encounter the difficulties with that diagnosis we have identified. In addition, they may be met with the objection that their condition is “transitory and minor” if it has not yet lasted for six months and its duration remains unclear. If they are unable to qualify as disabled except under the “regarded-as” prong, they will not receive accommodation rights. A further gap may emerge for an employee who can only show that her employer believed she had COVID but who cannot show that her employer believed she had long COVID; this employee may not be able to qualify under the “regarded-as” prong if her COVID is transitory and minor. She thus might not be protected by the ADA if her employer fires her or otherwise treats her adversely based on beliefs about her COVID diagnosis.

IV. “MAJOR BODILY FUNCTION” AND AMBIGUOUS DIAGNOSES IN THE REGULATIONS AND THE COURTS

Plaintiffs bringing claims of employment discrimination under the ADA must start with a prima facie case. Elements of the prima facie case include (1) that the plaintiff meets one of the three prongs of the definition of disability, (2) that the plaintiff was treated adversely by the employer, and (3) that the plaintiff was qualified for the position in question. Courts have varied in the showing they require of plaintiffs to

⁴⁴ 154 CONG. REC. S8347 (daily ed. Sept 11, 2008).

survive a motion to dismiss or a motion for summary judgment where the issue is whether the plaintiff could qualify as actually disabled and thus seek accommodations. This Part explains how some post-ADAAA courts insist on detailed factual explanations of how a person's major life activity is substantially limited by the claimed impairment. Some courts even require medical evidence of the impact of the plaintiff's impairment on the major life activity claimed to be limited. These courts have tended towards the physical reductionism we identified previously, insisting on specific physiological evidence of bodily dysfunction that is well outside of the norm in order for the plaintiff to qualify as substantially limited in a bodily function that is a major life activity. Such reductionism has appeared in the case law about the interpretation of substantial limits on the subsection (B) list of major bodily functions and in the cases where the claimed impairments involve ambiguous diagnoses.

A. EEOC Regulations

The regulations implementing the ADA as amended by the ADAAA play a central role in court decisions about when impairments substantially limit a major life activity, so we begin with them before turning directly to the case law. These regulations explain what evidence is needed to establish an actual disability. Although evidence of impairment alone is insufficient,⁴⁵ the additional required showings about major life activities and substantial limits are not meant to be demanding, according to the regulations.⁴⁶ In so providing, the regulations are implementing the ADAAA requirement that the definition of disability be broadly construed to the maximum permissible extent.⁴⁷

Instead of requiring extensive medical evidence of actual disability, the regulations say, “the primary object of attention in cases brought under the ADA should be whether covered entities have complied with their obligations and whether discrimination has occurred, not whether an individual's impairment substantially limits a major life activity.”⁴⁸ For “substantially limit[ing],” the comparison to be drawn is between the individual's ability to perform the identified activity and the ability of most people in the general population to perform the same activity.⁴⁹

⁴⁵ See 29 C.F.R. § 1630.2(j).

⁴⁶ 29 C.F.R. § 1630.2(i)(2) (major life activity not demanding); 29 C.F.R. § 1630.2(j)(1)(i) (substantially limits not demanding).

⁴⁷ 42 U.S.C. § 12102 (4)(A).

⁴⁸ 29 C.F.R. § 1630.2(j)(1)(iii).

⁴⁹ 29 C.F.R. § 1630.2(j)(1)(ii).

This comparison “usually will not require scientific, medical, or statistical analysis.”⁵⁰ Based on these principles, according to the regulations, individualized assessments of some physical or mental impairments predictably will, “in virtually all cases,” result in ADA coverage.⁵¹ Subsection (j)(3)(iii) of the regulation then lists examples of impairments that will predictably result in coverage because they substantially limit major bodily functions: intellectual disabilities substantially limit brain function, cancer substantially limits normal cell growth, diabetes substantially limits endocrine function, PTSD substantially limits brain function, and HIV substantially limits immune function, among others.⁵² Notably, these major bodily functions are described in physical terms—brains, cells, immune systems or endocrine systems—although no further physical evidence is usually to be required, according to the regulation. As described below, some courts cite these (j)(3)(iii) examples to conclude that plaintiffs have shown enough to survive summary judgment on actual disability when they allege that they have a condition such as cancer or diabetes without more detailed medical evidence. However, other courts insist that medical evidence must be available to bridge the gap between the impairment and the substantial limit on the bodily function if the plaintiff’s case is to continue.⁵³ Thus, a plaintiff with diabetes would need to bring forth actual medical evidence of the impact of her diabetes on her endocrine function in order to survive a motion to dismiss her claim for her failure to allege actual disability.

B. “Major Bodily Function” in the Courts

The Supreme Court has not decided a case interpreting “major bodily function” as an actual disability. The First, Third, Fourth, Fifth, Sixth, Tenth, and Eleventh Circuits all have directly relevant appellate decisions; these and other circuits also have district court decisions on point. These courts move in different directions about the extent of physical evidence needed to survive motions to dismiss or motions for summary judgment,⁵⁴ with the Tenth Circuit and district courts in the

⁵⁰ 29 C.F.R. § 1630.2(j)(1)(v).

⁵¹ 29 C.F.R. § 1630.2(j)(3)(ii).

⁵² 29 C.F.R. § 1630.2(j)(3)(iii).

⁵³ To assess how courts are handling plaintiffs’ contentions of actual disability based on a substantial limitation of a major bodily function, we searched Westlaw for (disability & ADA & “major bodily function” & “major life activity”). Our search initially yielded 246 cases through March 15, 2022. The complete data are on file with the authors.

⁵⁴ The standards for survival of a motion to dismiss under FED. R. CIV. P. 12(b)(6) and a motion for summary judgment are different. The former is a pleading requirement and plaintiffs must only allege claims which, if true, would be sufficient to support the case. The latter is an evidentiary standard, and the plaintiff must put forth evidence sufficient to support their prima facie case and to rebut defendant’s assertion of legitimate non-discriminatory reasons for their actions. *Swierkiewicz v. Sorema N.A.*, 534 U.S. 506, 510 (2002). Their import for the plaintiff is the same,

Second Circuit applying the most reductionist requirements, even in some cases requiring specific medical evidence. These interpretations of major bodily functions have significant implications for ambiguous diagnoses, especially when courts seek to construct the diagnosis in terms of bodily malfunction.

In the Tenth Circuit, plaintiffs claiming that an impairment substantially limits a major bodily function must provide expert medical testimony of their diagnosis, the causal relationship between the diagnosis and the bodily system malfunction, and an individualized assessment of how the malfunction is substantially limiting.⁵⁵ A recent decision involved an ambiguous diagnosis: PTSD. A former special education teacher presented her therapist's diagnosis of PTSD and her own testimony of how the condition affected her life, including disturbed sleep. The court characterized the (j)(3)(iii) predictive examples as "general" and insufficient to "overcome the need for expert medical evidence" to establish the causal connection between the life activity of sleeping and the substantial limitation associated with her PTSD.⁵⁶ The court's description of the plaintiff's symptoms as merely "alleged" perhaps also reveals epistemological doubt that, without expert medical testimony, her claims are not to be believed.⁵⁷ Another plaintiff had expert medical testimony of her diagnosis of rheumatoid arthritis and the effects of the autoimmune condition on her musculoskeletal system; the court found this testimony insufficient to establish an individualized assessment of her disease's impact on her bodily systems.⁵⁸ Other district court decisions in the Tenth Circuit also look for medical evidence to support a causal connection between the diagnosis and the severity of the claimed effect on the life activity.⁵⁹

however: a plaintiff who loses on either basis because they have not met the standard applied to an assertion of one of the prongs of disability has lost their claim to anti-discrimination without being able to advance any evidence of what actually happened. For the most part in what follows, therefore, we will not distinguish between these two different ways in which the plaintiff can lose at preliminary stages in the case.

⁵⁵ See *Neri v. Bd. of Educ.*, 860 Fed. App'x 556 (10th Cir. 2021).

⁵⁶ *Id.* at 563.

⁵⁷ *Id.*

⁵⁸ *Scavetta v. Dillon Co., Inc.*, 569 Fed. App'x 622, 625 (10th Cir. 2014). See also *Felkins v. City of Lakewood*, 774 F.3d 647, 651 (10th Cir. 2014) (concluding that expert medical testimony about the causal effects of avascular necrosis on circulatory function necessary to show actual disability).

⁵⁹ *E.g.*, *Bowers v. Netsmart Techs. Inc.*, 2021 WL 2104985 (D. Kan. 2021) (requiring additional evidence to show that diabetes affected major life activities of sleeping and working); *Tygrett v. Denver Water*, 2020 WL 6873953 (D. Colo. Nov. 23, 2020) (finding medical records referencing limits on lifting barely sufficient to make an individualized showing that the plaintiffs' back injury substantially limiting in comparison to the general population); *EEOC v. UPS Ground Freight, Inc.*, 2020 WL 1984293 (D. Kan. Apr. 27 2020) (not reported) (only considering whether plaintiff was regarded as disabled because he had recovered from the stroke that caused muscular weakness). *But see* *Angell v. Fairmount Fire Protection Dist.*, 907 F. Supp. 2d 1242 (D. Colo. 2012)

Although the Second Circuit does not have a relevant appellate decision, district court decisions in that circuit similarly insist on detailed medical showings of the relationship between the claimed impairment and the severity of the functional limitation. Just as a diagnosis of hyperthyroidism and required treatment is insufficient for substantial limitation on endocrine system function,⁶⁰ a diagnosis of PTSD has been insufficient for plaintiffs claiming actual disability despite their testimony about their fears or their missing work because of the condition.⁶¹ Evidence of anxiety and a diagnosis of panic disorder was insufficient even though it was severe at times and caused physical symptoms including chest and stomach pain and shortness of breath.⁶² By comparison, evidence of three hospitalizations, along with having been picked up lying in the street, sufficed for a plaintiff claiming that his bipolar disorder substantially limited the life activities of brain function, concentrating, and breathing,⁶³ gross hematuria disease that caused frequent urination was substantially limiting of the major life activity of genitourinary function because it also caused urinary tract bleeding,⁶⁴ and allergic reactions to mold that required use of an asthma machine substantially limited the major life activity of breathing.⁶⁵ These decisions illustrate how plaintiffs in the Second Circuit are more likely to be successful in their claims of actual disability when they can bring forth medical measures in addition to testimony about physical symptoms related to their diagnosis.

(finding cancer substantially limited major life activity of normal cell growth).

⁶⁰ *Betances v. MetroPlus Health Plan, Inc.*, No. 20-CV-2967 (JGK), 2021 WL 2653363, at *4–5 (S.D.N.Y. July 7, 2021).

⁶¹ *Larnard v. McDonough*, No. 6:17-CV-06257 EAW, 2022 WL 31505, at *6 (W.D.N.Y. Jan. 4, 2022) (fear of flying); *Oyer v. N.Y. State*, No. 1:19-CV-01201 EAW, 2020 WL 5642186, at *7 (W.D.N.Y. Sept. 22, 2020) (missing work); *Birnbach v. AmeriCare Found. Inc.*, No. 3:19-CV-01328 (VLB), 2021 WL 4263361, at *10 (D. Conn. Sept. 18, 2021) (finding impairments of ADHD, dyslexia, and auditory processing disorder insufficient to show substantial limit in major life activities of reading, learning, concentrating, thinking, and communicating with others without more evidence, although that evidence could be non-medical); *Pineda v. ESPN, Inc.*, No. 3:18-CV-325 (MPS), 2018 WL 5268123, at *4 (D. Conn. Oct. 23, 2018) (describing need for specific evidence of how rape related PTSD causes limits in a major life activity); *Martinsky v. City of Bridgeport*, 814 F. Supp. 2d 130, 143 (D. Conn. 2011), *aff'd*, 504 F. App'x 43 (2d Cir. 2012) (finding anxiety disorder debilitating to the point of withdrawing to the bathroom during work and requiring hospitalization insufficient to survive summary judgment as substantially limiting a major life activity).

⁶² *Martinsky*, 814 F. Supp. 2d at 143.

⁶³ *Robles v. Medisys Health Network, Inc.*, No. 19-CV-6651 (ARR), 2020 WL 3403191, at *11 (E.D.N.Y. June 19, 2020).

⁶⁴ *Zako v. Encompass Digit. Media, Inc.*, No. 3:19-CV-844 (MPS), 2020 WL 3542323, at *8 (D. Conn. June 30, 2020).

⁶⁵ *Shine v. N.Y.C. Hous. Auth.*, No. 19-CV-04347 (RA), 2020 WL 5604048, at *7 (S.D.N.Y. Sept. 18, 2020) (but similar symptoms without the prescribed mechanical support would not suffice).

The Sixth Circuit likewise turns to specific physical evidence about the functional impact of a condition, although not all cases require expert medical evidence. For example, one plaintiff had a physician note that she was receiving treatment “aimed at rebalancing [her] thyroid and adrenal glands,” as “present[ing] with extreme fatigue, peripheral neuropathy, thyroid disorder, and decreased mental clarity,” and as having been prescribed Synthroid, a treatment for hypothyroidism.⁶⁶ The appellate court disagreed with the trial court’s conclusion that without an explicit diagnosis this evidence was insufficient because plaintiff’s medication treated hypothyroidism, an impairment of endocrine function, and her physician had noted substantial limits in major life activities of concentrating and thinking.⁶⁷ However, the plaintiff’s case would have been dismissed without the evidence that she was receiving medication prescribed for the condition.

By contrast, another Sixth Circuit district court recently reasoned that a plaintiff with the ambiguous diagnosis of fibromyalgia had made a sufficient showing for actual disability when she asserted her condition both (1) caused difficulties in exercising, engaging in her favorite hobbies, sleeping, and concentrating, and (2) made her nerve endings unduly sensitive to heat and cold thus impairing neurological function.⁶⁸ The physical manifestation of her condition in her nerve endings was particularly impressive to the court. On the other hand, another plaintiff was unable to survive a ruling on actual disability based on her testimony that she had been diagnosed with PTSD, which affected her abilities to work and sleep, without clinical evidence of her diagnosis.⁶⁹ Similarly, a recent Sixth Circuit district court decision rejected the sufficiency of a diagnosis of essential tremors as substantially limiting neurological function without a specific showing of how “the diagnosed ‘condition’ . . . also results in some meaningful functional difficulty as compared to the population at large.”⁷⁰ These courts seem to want some

⁶⁶ *Barlia v. MWI Veterinary Supply, Inc.*, 721 Fed. App’x 439, 445–46 (6th Cir. 2018) (internal quotation marks omitted).

⁶⁷ *Id.* at 447; *see also Peltier v. John Deere Co.*, No. 3:20-CV-435, 2022 WL 424882, at *5 (E.D. Tenn. Jan. 14, 2022) (finding diagnoses of diabetes alone insufficient to show substantial limitation of major life activity but plaintiff survived summary judgment on actual disability with evidence that he is insulin dependent, his diabetes was not always under control, and he had a pending appointment with endocrinology to see if an insulin pump would be appropriate).

⁶⁸ *McGriff v. Beavercreek City Sch. Dist.*, No. 3:18-CV-372, 2021 WL 2401921, at *8 (S.D. Ohio June 11, 2021).

⁶⁹ *Swanton v. Wyndham Vacation Resorts, Inc.*, No. 3:20-CV-00480, 2021 WL 5744708, at *16 (M.D. Tenn. Dec. 1, 2021).

⁷⁰ *McGonegle v. Select Comfort Retail Corp.*, No. 1:19-CV-442, 2021 WL 229038, at *8 (S.D. Ohio Jan. 22, 2021).

kind of physiological measure or a showing of actual disability in addition to plaintiffs' own evidence of what they are unable to do in the world.

Third Circuit decisions have reached more mixed results about whether medical evidence is required when plaintiffs seek to draw the inferences suggested by (j)(3)(iii). One unpublished appellate decision holds that a diagnosis of early-stage breast cancer was insufficient evidence of substantial limitation of the major life activity of cell growth without further individualized evidence of the cancer's effects on the plaintiff's cells or other life activities.⁷¹ Other district courts in the circuit have held that plaintiffs' cases survive when a physician provides evidence that their stroke and seizure affected sleeping and concentrating⁷² or when they claim that HIV positivity substantially limits immune system function,⁷³ but not when they claim a 35 percent loss of function from a finger injury without further medical evidence.⁷⁴ A decision regarding the ambiguous diagnosis of fibromyalgia is to similar effect: the plaintiff's case survived on actual disability when she brought evidence from herself, her husband, and her "voluminous medical records" that her ability to walk, sleep, and perform routine household chores was limited.⁷⁵ This conclusion was "bolster[ed]" by evidence that she regularly experienced pain when performing these activities.⁷⁶ Another plaintiff claiming severe depression and chronic fatigue survived the defendant's effort to end the litigation when her records included applications for Family and Medical Leave Act (FMLA) leave for these conditions approved by her employer although the court's opinion contains no further description of the evidence in her medical records.⁷⁷

⁷¹ *Alston v. Park Pleasant*, 679 Fed. App'x 169, 172 (3d Cir. 2017) (quoting 29 C.F.R. § 1630.2(j)(3)(ii)).

⁷² *Marx v. Arendosh Heating & Cooling, Inc.*, No. 2:20-CV-00338, 2020 WL 7425275 at *4 (W.D. Pa. Dec. 18, 2020).

⁷³ *Doe v. Triangle Doughnuts, LLC*, 472 F. Supp. 3d 115, 135 (E.D. Pa. 2020) (expressing skepticism about the sufficiency of the evidence).

⁷⁴ *Weber v. Don Longo, Inc.*, No. CV 15-2406 (KM)(MAH), 2018 WL 1135333, at *12 (D.N.J. Mar. 2, 2018).

⁷⁵ *Howard v. Pa. Dep't of Pub. Welfare*, No. CIV.A. 11-1938, 2013 WL 102662, at *11 (E.D. Pa. Jan. 9, 2013) (not reported).

⁷⁶ *Id.*

⁷⁷ *Santee v. Lehigh Valley Health Network, Inc.*, No. CIV.A. 13-3774, 2013 WL 6697865, at *5 (E.D. Pa. Dec. 19, 2013); *see also* *Kravits v. Shinseki*, No. CIV.A. 10-861, 2012 WL 604169, at *6 (W.D. Pa. Feb. 24, 2012) (holding that plaintiff survived summary judgment on actual disability by alleging that sleep apnea interfered with major life activity of sleeping; court did not address claim that fibromyalgia substantially limited major life activities); *Geronimo v. Pottsville Ford*, No. 3:20-CV-02145, 2021 W.L. 418629, at *4 (M.D. Pa. Sept. 14, 2021) (giving plaintiff the benefit of doubt that asthma substantially limits the life activity of breathing and dyslexia limits the life activity of reading; even though pleadings lack specificity, plaintiff has provided information beyond the diagnoses).

The Fourth Circuit may also be somewhat less demanding in the medical evidence required of plaintiffs. A plaintiff's pleading that herniated discs "caused him difficulties" in lifting, running, sleeping, driving, and turning his neck was insufficient until amended to give the medical details that his herniation was at the C7-T1 level and that he had muscle spasms, pain, numbness, and difficulty sleeping.⁷⁸ Here, the court required the plaintiff's description of his poor functioning to be supplemented medically. The case of a plaintiff with the ambiguous diagnosis of major depressive disorder and a diagnosis of colitis survived with evidence of her treatment records and detailed explanations of how she experienced uncontrollable urges to cry and sudden episodes of diarrhea that would result in her soiling herself if she could not reach a bathroom immediately.⁷⁹ Another plaintiff succeeded with evidence of his disabilities of ADHD and autism spectrum disorder that included testing for and diagnoses of the conditions, along with a letter from his counselor that he may have difficulty with social interactions and staying on task.⁸⁰

The Fifth Circuit has concluded that detailed evidence of diagnoses of PTSD and depression—both ambiguous—together with the plaintiff's description of trouble forming thoughts and sleeping normally was sufficient to infer actual disability under (j)(3)(iii).⁸¹ This conclusion also relied on the (j)(3)(iii) statement in the regulations that scientific, medical, or statistical evidence should not be necessary to show that some conditions amount to actual disabilities.⁸² District courts in the Fifth

⁷⁸ *Miller v. Md. Dep't of Nat. Res.*, 813 F. App'x 869, 875–76 (4th Cir. 2020) (per curiam); *Miller v. Md. Dep't of Nat. Res.*, No. CV GLR-17-2349, 2021 WL 3617214, at *9 (D. Md. Aug. 16, 2021); see also *Hice v. Mazzella Lifting Techs., Inc.*, No. 2:21CV281, 2022 WL 636640, at *6 (E.D. Va. Mar. 4, 2022) (distinguishing initial complaint in *Miller* because Hice had evidence that his degenerative arthritis caused debilitating pain and limited use of back and legs); *Khan v. UNC Health Care Sys.*, No. 1:20CV977, 2021 WL 4392012, at *5 (M.D.N.C. Sept. 24, 2021) (holding that non-alcoholic steatohepatitis, ulcerative colitis, splenomegaly, hematuria, and kidney stones sufficient to survive summary judgment because they substantially limiting digestive system and bladder function); *Granda v. Old Dominion Freight Line, Inc.*, No. CV 3:19-3294-JMC-KDW, 2021 WL 4596995, at *8 (D.S.C. July 14, 2021), report and recommendation adopted, No. 3:19-CV-03294-JMC, 2021 WL 4472743 (D.S.C. Sept. 30, 2021) (finding it a "close one" but that plaintiff survived summary judgment on actual disability based on inconclusive angiogram, slurred speech and issues with balance); *U.S. Equal Emp. Opportunity Comm'n v. CACI Secured Transformations, LLC*, No. CV JKB-19-2693, 2021 WL 1840807, at *15 (D. Md. May 7, 2021) (holding that the concussion and brain aneurism causing chronic headaches and difficulty with concentration, sensitivity to light and sound, nausea, dizziness substantially limited life activities of concentrating and thinking and neurological and brain functions as a matter of law).

⁷⁹ *Patton v. Shulkin*, No. 7:16-CV-00250, 2018 WL 1321589, at *7 (W.D. Va. Mar. 14, 2018).

⁸⁰ *Steinhilber v. Yanfeng US Auto. Interiors I, LLC*, No. 6:18-CV-2966-TMC-KFM, 2020 WL 6219421, at *11 (D.S.C. May 11, 2020), report and recommendation adopted *sub nom.* *Steinhilber v. Yanfeng US Auto. Interiors Sys. I, LLC*, No. 6:18-CV-2966-TMC, 2020 WL 4915568 (D.S.C. Aug. 21, 2020), appeal dismissed, No. 20-2012, 2021 WL 1113204 (4th Cir. Jan. 6, 2021).

⁸¹ *Williams v. Tarrant Cnty. Coll. Dist.*, 717 F. App'x 440, 449 (5th Cir. 2018).

⁸² *Id.* at 448 (referencing 29 C.F.R. § 1630.2(j)(1)(v)).

Circuit have allowed the (j)(3)(iii) inference for plaintiffs arguing that cancer substantially limits the major life activity of normal cell growth,⁸³ but have referred to physician evidence for a stroke limiting speaking, hearing, and brain and bladder function⁸⁴; deep vein thrombosis and pulmonary embolism inhibiting sitting and working⁸⁵; asbestos exposure and tuberculosis limiting breathing and the bodily functions of respiration and circulation⁸⁶; or diabetes limiting walking.⁸⁷

The Seventh, Eighth, and Ninth Circuits have district court decisions that vary in the extent to which they rely on medical evidence. To take some illustrations, medical evidence that Crohn's disease caused abdominal pain, diarrhea, urgency, and incontinence sufficed to substantially limit digestive and bowel function⁸⁸; and renal cancer limited normal cell growth.⁸⁹ Courts found sufficient medical records that a plaintiff had been diagnosed with PTSD and depression and reported sleeping only two hours per night,⁹⁰ medical records of hospitalization and treatment for severe depression coupled with constant weeping and suicidal ideation,⁹¹ plaintiff's reports of her struggles in performing tasks such as laundry with her chronic fatigue syndrome,⁹² medical records of a back injury and fibromyalgia,⁹³ and medical evidence of treatment for depression that affected many facets of work and personal life.⁹⁴ However, medical evidence of a stroke was insufficient when the

⁸³ *Equal Emp. Opportunity Comm'n v. K&L Auto Crushers, LLC*, No. 620-CV-00455-JCB-JDL, 2021 WL 391313, at *6 (E.D. Tex. Feb. 1, 2021), *report and recommendation adopted*, No. 6:20-CV-00455, 2021 WL 742875 (E.D. Tex. Feb. 25, 2021); *Oncala v. CASA of Terrebonne Par., Inc.*, No. CV 19-14760, 2020 WL 3469838, at *6 (E.D. La. June 25, 2020); *Equal Emp. Opportunity Comm'n v. Mid S. Extrusion Inc.*, 341 F. Supp. 3d 653, 660 (W.D. La. 2018).

⁸⁴ *McKinney v. Sheriffs Off. Rapides Par.*, No. 1:19-CV-01339, 2021 WL 1083979, at *6 (W.D. La. Mar. 19, 2021).

⁸⁵ *Gonzalez v. Tex. Health & Hum. Servs. Comm'n*, No. 5:13-CV-183-DAE, 2014 WL 6606629, at *8 (W.D. Tex. Nov. 19, 2014).

⁸⁶ *Mid S. Extrusion*, 341 F. Supp. 3d at 660.

⁸⁷ *Rodriguez v. Dollar Gen. Corp.*, No. SA-18-CV-00713-JKP, 2020 WL 4434932, at *5 (W.D. Tex. July 30, 2020).

⁸⁸ *Mulcahy v. Cook Cnty.*, No. 17 C 8235, 2020 WL 6940982 at *12 (N.D. Ill. Nov. 25, 2020).

⁸⁹ *Hoffman v. Carefirst*, 737 F. Supp. 2d 976, 985 (N.D. Ind. 2010).

⁹⁰ *Monroe v. Indiana*, No. 1:14-CV-00252-SEB-DML, 2016 WL 1270202, at *8 (S.D. Ind. Mar. 31, 2016).

⁹¹ *Stevens v. Ill. Dep't of Corr.*, No. 1:12-CV-01419-SLD-TSH, 2015 WL 5686615, at *9 (C.D. Ill. Sept. 28, 2015).

⁹² *Wirey v. Richland Comty. Coll.*, 913 F. Supp. 2d 633, 641–42 (C.D. Ill. 2012).

⁹³ *Grive v. Clark Cnty.*, No. 2:17-CV-03109-JAD-VCF, 2019 WL 12875432, at *7 (D. Nev. Dec. 2, 2019).

⁹⁴ *Dentice v. Farmers Ins. Exch.*, No. 10-C-113, 2012 WL 2504046, at *11 (E.D. Wis. June 28, 2012).

plaintiff's only ongoing problem was hypertension requiring medication,⁹⁵ and plaintiff's evidence of hospitalization for severe anxiety and bouts of severe anxiety at her job did not suffice.⁹⁶

In a decision of the Eleventh Circuit, a primary care physician's explanation of the retinal damage from diabetes sufficed to show a substantial limitation of the major activity of sight⁹⁷ and a physician's affidavit detailing how degenerative disc disease caused nerve roots to radiate pain also sufficed.⁹⁸ In contrast, a physician's description of residual mild tricuspid regurgitation with shortness of breath while lying down after a heart attack was insufficient when it did not have much effect on the plaintiff's function or chronically affect her life.⁹⁹ And several district court decisions are very favorable to plaintiffs arguing that actual disability should be predicted under the (j)(3)(iii) examples: PTSD is a disability as a matter of law in one case,¹⁰⁰ and intellectual disabilities by definition substantially limit the major life activity of learning in another.¹⁰¹

To summarize, physical reductionism is by no means uniform in the case law. But it is especially prevalent in some circuits, where the tendency is to insist on medical evidence of functional limitations, or at least to prioritize such information in deciding whether a plaintiff's case can survive on the very first step of a claim of discrimination based on actual disability. Plaintiffs with ambiguous diagnoses lacking physiological specifics are particularly vulnerable to finding their claims dismissed. Although cases are still very limited, some of these themes are emerging in cases in which plaintiffs claim disability based on either their initial COVID diagnosis or its lingering effects as long COVID. In the next Part, we describe how recent federal guidance and assistance relies on physiological measures in discussion of long COVID as a disability.

⁹⁵ Jackson v. Union Pac. R.R., No. 4:19-CV-00069-RGE-RAW, 2021 WL 1726895, at *14 (S.D. Iowa Mar. 29, 2021), *appeal filed*.

⁹⁶ Torres v. Weigel Broad. Co., 852 F. Supp. 2d 1106, 1112 (E.D. Wis. 2012).

⁹⁷ Felix v. Key Largo Mgmt. Corp., No. 21-10381, 2021 WL 5037570, at *3 (11th Cir. Oct. 29, 2021) (per curiam).

⁹⁸ Mazzeo v. Color Resols. Int'l, LLC, 746 F.3d 1264, 1268 (11th Cir. 2014).

⁹⁹ Lewis v. City of Union City, 934 F.3d 1169, 1181 (11th Cir. 2019).

¹⁰⁰ Callahan v. Emory Healthcare, Inc., No. 1:18-CV-4856-WMR-JSA, 2021 WL 2483160, at *18 (N.D. Ga. Jan. 7, 2021), *report and recommendation adopted*, No. 1:18-CV-04856-WMR, 2021 WL 732352 (N.D. Ga. Feb. 10, 2021), *aff'd*, No. 21-10541, 2021 WL 4461587 (11th Cir. Sept. 29, 2021).

¹⁰¹ Adams v. Crestwood Med. Ctr., 504 F. Supp. 3d 1263, 1284 (N.D. Ala. 2020).

V. FEDERAL AGENCY APPROACHES TO LONG COVID

Through the course of the pandemic, federal agencies have continued to issue materials concerning COVID-19. Important for anti-discrimination purposes have been the various documents issued by the Department of Health and Human Services (DHHS), the Department of Justice (DOJ), the Food and Drug Administration (FDA), and the Equal Employment Opportunity Commission (EEOC). Many of these involved temporary suspensions of otherwise applicable regulations or enforcement. For example, the FDA suspended the requirement for in person visits for prescriptions of medication abortion.¹⁰² Important DHHS determinations involved non-discrimination in access to crisis care (that is, to acute care such as ICU admission or ventilator support in circumstances of scarcity)¹⁰³ and the implications of Centers for Disease Control guidance for Emergency Medical Treatment and Labor Act obligations.¹⁰⁴ DHHS and DOJ have issued guidance on long COVID as a disability.¹⁰⁵ The EEOC has also issued and updated technical assistance for employers about COVID-19.¹⁰⁶

The guidance issued by DHHS and DOJ in July 2021¹⁰⁷ concerns Title II of the ADA (non-discrimination in public services),¹⁰⁸ Title III of

¹⁰² *Questions and Answers on Mifeprex*, U.S. FOOD & DRUG ADMIN., (Dec. 16, 2021), <https://www.fda.gov/drugs/postmarket-drug-safety-information-patients-and-providers/questions-and-answers-mifeprex> [<https://perma.cc/FRG3-QGEW>].

¹⁰³ *OCR Provides Technical Assistance to Ensure Crisis Standards of Care Protect Against Age and Disability Discrimination*, U.S. DEPT OF HEALTH & HUM. SERVICES (Jan. 14, 2021), <https://www.hhs.gov/about/news/2021/01/14/ocr-provides-technical-assistance-ensure-crisis-standards-of-care-protect-against-age-disability-discrimination.html> [<https://perma.cc/XJW9-4NBN>].

¹⁰⁴ *Emergency Medical Treatment and Labor Act (EMTALA) Requirements and Implications Related to COVID-19 (Revised)*, CTRS. FOR MEDICARE & MEDICAID SERVS. (March 30, 2020), <https://www.cms.gov/medicareprovider-enrollment-and-certificationsurvey/certificationgen-infopolicy-and-memos-states-and/emergency-medical-treatment-and-labor-act-emtala-requirements-and-implications-related-covid19> [<https://perma.cc/D3AV-HFKN>].

¹⁰⁵ Off. for Civ. Rights, *Guidance on “Long COVID” as a Disability Under the ADA, Section 504, and Section 1557*, U.S. DEPT OF HEALTH & HUM. SERVS. (July 26, 2021), <https://www.hhs.gov/civil-rights-for-providers/civil-rights-covid19/guidance-long-covid-disability/index.html> [<https://perma.cc/S38D-7CX8>].

¹⁰⁶ *What You Should Know About COVID-19 and the ADA, the Rehabilitation Act, and Other EEO Laws*, U.S. EQUAL EMP. OPPORTUNITY COMM’N (Jul. 12, 2022), <https://www.eeoc.gov/wysk/what-you-should-know-about-covid-19-and-ada-rehabilitation-act-and-other-eeo-laws> [<https://perma.cc/G6NH-L4DU>].

¹⁰⁷ Off. for Civ. Rights, *supra* note 105.

¹⁰⁸ 42 U.S.C. §§ 12131–12134.

the ADA (non-discrimination in public accommodations),¹⁰⁹ the Rehabilitation Act § 504,¹¹⁰ and the Affordable Care Act § 1557.¹¹¹ The guidance follows the three-pronged definition of disability in the ADA that disability means a physical or mental impairment that substantially limits a major life activity, a record of the same, or being regarded as having the same.¹¹² In this sense, the guidance states somewhat tentatively that “long COVID can be a disability under the ADA, Section 504, and Section 1557 if it substantially limits one or more major life activities.”¹¹³ It then pursues a clearly physiological account of determining how long COVID can meet the standard for actual disability, beginning by specifying that long COVID is an “impairment” because it “is a physiological condition affecting one or more body systems.”¹¹⁴ Examples of such conditions include lung damage, kidney damage, heart damage, neurological damage, circulatory system damage such as impeded blood flow, or lingering emotional illness or other mental health conditions. When—as a result of such damage—a major body system malfunctions, a major life activity of the person is affected. Here, the reference is specifically to the ADAAA provision regarding bodily system functions as major life activities.¹¹⁵

The remaining question within the DHHS/DOJ guidance for determining actual disability is whether bodily system damage is sufficient to “substantially limit” the major life activity. The guidance gives examples of such substantial limits of bodily function couched in terms of the impact of physiological bodily damage on the person.¹¹⁶ For example, the guidance states that lung damage resulting in shortness of breath substantially limits the life activity of respiratory function. Intestinal pain, nausea, or vomiting lingering for months is a substantial limit of gastrointestinal function. Memory loss or “brain fog” is a substantial limit in brain function, concentrating, or thinking. All these statements continue to refer to the system function rather than to the impact of the possible COVID damage on the individual’s abilities to function in the world.¹¹⁷ So, for example, the problem with lung damage is how respiratory function is affected, not how the person is able to perform daily tasks, walk, or sleep.

¹⁰⁹ 42 U.S.C. §§ 12181–12189.

¹¹⁰ 29 U.S.C. § 794.

¹¹¹ 42 U.S.C. § 18116(a).

¹¹² 42 U.S.C. § 12102(1).

¹¹³ Off. for Civ. Rights, *supra* note 105.

¹¹⁴ *Id.*

¹¹⁵ 42 U.S.C. § 12102(2)(B).

¹¹⁶ Off. for Civ. Rights, *supra* note 105.

¹¹⁷ *Id.*

The EEOC has issued technical assistance concerning COVID-19 for employment beginning in the spring of 2020 and updated several times afterwards.¹¹⁸ Much of the initial assistance concerned workplace safety and workers with COVID.¹¹⁹ Extensive assistance addressed vaccination and the treatment of employees' medical and religious objections. The assistance also considers reasonable accommodations for COVID, including teleworking, reduced contact or distancing, and changes to account for increased stress that may be more difficult for people with mental health conditions to handle. COVID illness itself may require accommodations to allow for recovery or symptom management. People also may need accommodations not because they have become ill with COVID but because they have other conditions that could make contracting COVID risky for them, such as diabetes or heart conditions. The technical assistance points out that the reasonableness of these accommodations may depend on the circumstances. Furthermore, accommodations are not required if they present an undue hardship for the employers.¹²⁰ The assistance points out that pandemic conditions may affect the calculation of whether an accommodation is an undue hardship; for example, allowing shift changes may now be a hardship when there are difficulties in making sure shifts are covered because of high infection rates among employees.¹²¹ Cash-strapped employers may find accommodation-related expenses "significant" and thus a hardship, too.¹²² In addition, the assistance considers how telework experience during the pandemic may be relevant to determining whether telework is a reasonable accommodation when employers later voice concerns that work cannot be successfully performed remotely.¹²³

Protection from discrimination based on association with a person with a disability has become especially important for many employees during the COVID-19 pandemic. The ADA provides that it is discrimination to exclude or otherwise deny equal jobs or benefits based on the known association of the employee to a person with a disability.¹²⁴ This statutory provision has been interpreted not to grant a right to reasonable accommodations to the employee based on associational discrimination.¹²⁵ Thus, the assistance reminds employers that employees are

¹¹⁸ U.S. EQUAL EMP. OPPORTUNITY COMM'N, *supra* note 106.

¹¹⁹ *Id.*

¹²⁰ 42 U.S.C. § 12112(b)(5); 42 U.S.C. § 12111(10) (defining "undue hardship").

¹²¹ U.S. EQUAL EMP. OPPORTUNITY COMM'N, *supra* note 106.

¹²² *Id.*

¹²³ *Id.*

¹²⁴ 42 U.S.C. § 12112(b)(4).

¹²⁵ *Den Hartog v. Wasatch Academy*, 129 F.3d 1076 (10th Cir. 1997); *Questions & Answers: Association Provision of the ADA*, U.S. EQUAL EMP. OPPORTUNITY COMM'N (Oct. 17, 2005), <https://www.eeoc.gov/laws/guidance/questions-answers-association-provision->

not entitled to claim accommodations because of COVID risks to individuals with whom they are in contact. Also, employees are not entitled to claim accommodations because they have been exposed to COVID by someone with whom they associate.

An update issued December 14, 2021, addresses specifically when COVID is an actual disability under the ADA.¹²⁶ The determination of disability, as always, involves an individualized assessment. The assessment must consider whether COVID is an impairment that substantially limits a major life activity. Thus, mild COVID symptoms comparable to those of an upper respiratory infection will not qualify as an actual disability. However, the assistance notes with reference to the HHS/DOJ guidance, malfunction of a major bodily system is an impairment of a major life activity.¹²⁷ This malfunction need not be of extended duration, but it must be sufficiently severe to qualify as an actual disability. One conclusion to draw from this analysis is that individuals suffering severe COVID-19 infections but recovering within six months might qualify as having an actual disability. As discussed above, it would be a separate question whether these individuals could qualify under the regarded as prong for disability, if their infections are not regarded by their employers as having an illness of at least six months duration. Consequently, individuals might fall into a gap between the actual and the regarded as prongs for disability when they have not been definitively diagnosed with long COVID, even though they may later be diagnosed with that condition. In the interim, unless they qualify as actually disabled, they will not be entitled to accommodations, with potentially deleterious consequences for their job performance and treatment by their employer.

VI. COVID AND LONG COVID IN THE COURTS

Cases in which plaintiffs claim disability discrimination in employment due to COVID-19 were beginning to appear in the courts by the spring of 2022. To a significant extent, court decisions parallel the approaches taken to the evidence needed to survive dismissal when plaintiffs claim body system malfunction or ambiguous diagnoses as disabilities, with district courts in the Tenth and Second Circuits proving the most difficult.¹²⁸ Plaintiffs pleading COVID as an actual disability are at risk of the gaps we identified earlier.¹²⁹ They may not be able to claim

ada#:~:text=What%20is%20the%20association%20provision,per-son%20with%20a%20known%20disability [https://perma.cc/Q7AS-PF9B].

¹²⁶ U.S. EQUAL EMP. OPPORTUNITY COMM'N, *supra* note 106.

¹²⁷ *Id.*

¹²⁸ See *supra* notes 55–65 and accompanying text.

¹²⁹ See *infra* Part III.

actual disability if their initial infection is mild or short-term. Plaintiffs who claim adverse treatment—typically termination—because they informed their employer that they had COVID and were required to stay in quarantine may not qualify as actually disabled if their physical conditions were insufficiently severe or appear to have resolved. They may not qualify as regarded as disabled if their condition is judged transitory and minor. Plaintiffs who claim actual disability and the need for accommodations based on lingering COVID symptoms may be judged to have advanced insufficient evidence to demonstrate an impairment substantially limiting a major life activity. Also, plaintiffs are not entitled to accommodations based on their association with someone with COVID or based on their association with someone at high risk from COVID because of a disability. The sub-regulatory materials described in the preceding section have played an important role in the reasoning of some courts about whether COVID or long COVID are disabilities.¹³⁰

A. COVID as an Actual Disability

Take first claims by plaintiffs that a COVID-19 infection is an actual disability. A district court in the Tenth Circuit granted summary judgment to the employer when the employee claimed that she had been discharged because of exposure to her father's COVID-19.¹³¹ The employee claimed associational discrimination based on her father's illness, but the court concluded that his acute COVID could not be a disability because, even though her father had died, his infection was “transitory” because death had come within 15 days.¹³² If such COVID cases could qualify as a disability, this court said, the scope of the ADA would extend to anyone “sick for just a few days.”¹³³ A district court in Missouri dismissed a claim of discrimination based on COVID-19 as an actual disability when the plaintiff had a “short and temporary illness” and did not plead further evidence of long COVID.¹³⁴ A district court in the Second Circuit also granted a motion to dismiss when the plaintiff pled as a disability his chronic kidney disease coupled with a COVID infection and conflicting evidence about whether he had lingering problems with taste and smell.¹³⁵

¹³⁰ See discussion *infra* Part V.

¹³¹ *Baum v. Dunmire Prop. Mgmt., Inc.*, No. 21-CV-00964-CMA-NYW, 2022 WL 889097, at *5 (D. Colo. Mar. 25, 2022).

¹³² *Id.*

¹³³ *Id.* (interpreting both the guidance and the “transitory and minor” statutory language).

¹³⁴ *Anderson v. L. Keeley Construction*, 2022 W.L. 3585596 (E.D. Mo. Aug. 22, 2022).

¹³⁵ *Earl v. Good Samaritan Hosp. of Suffern*, No. 20 CV 3119 (NSR), 2021 WL 4462413, at *6 (S.D.N.Y. Sept. 28, 2021); see also *Williams v. City of New York*, No. 20-CV-8622 (JPO), 2022 WL 976966, at *2 (S.D.N.Y. Mar. 31, 2022) (dismissing claim of actual disability when plaintiff did not allege facts regarding his COVID symptoms or what major life activities he could not perform as

District courts in the Eleventh Circuit have reached more mixed conclusions. A terminated employee claimed that she had been refused the accommodation of temporary leave due to COVID. She survived a motion to dismiss on actual disability because she tested positive for several weeks and had “severe weakness, fatigue, brain fog, high blood pressure, cough, difficulty breathing, fever, and swollen eyes, all of which she alleges were caused by COVID-19.”¹³⁶ The court distinguished cases in which plaintiffs had described their symptoms less specifically.¹³⁷ In one of these cases, the court had observed that if COVID infection itself is a disability, “employers across the nation will be shocked to learn that if any of their employees are sick for just a few days, then those employees are ‘disabled’ and now protected by the ADA.”¹³⁸ The court noted, however, that the standard of evidence would be more demanding at the summary judgment stage, where plaintiff would need evidence that her condition was not severe or short term.

There are also cases in which the employee seeks COVID accommodations such as working from home due to an underlying health condition alleged to qualify as a disability. In these cases, the problem for the employee is not whether their COVID is a disability but whether their underlying condition is. Lupus is a disability,¹³⁹ as are multiple sclerosis,¹⁴⁰ cystic fibrosis and CF-related diabetes,¹⁴¹ and renal tubular acidosis, a condition that causes kidney stones and requires surgery.¹⁴² But in the judgment of one court, that the plaintiff was a smoker with a history of pneumonia was not sufficient for actual disability and accommodations, despite his increased COVID risk from these conditions.¹⁴³ On the other hand, in another district court the plaintiff survived a motion for failure to state a claim when she contended that her

a result), *Earl v. Good Samaritan Hosp. of Suffern NY*, No. 20 CIV. 3119 (NSR), 2022 WL 4087597 (S.D.N.Y. Sept. 6, 2022) (plaintiff needed to be able to argue that his condition substantially limited his major life activities at the time he was denied the accommodation and cannot use later long COVID symptoms to show this).

¹³⁶ *Brown v. Roanoke Rehab. & Healthcare Ctr.*, No. 3:21-CV-00590-RAH, 2022 WL 532936, at *1 (M.D. Ala. Feb. 22, 2022) (citing OSHA guidance).

¹³⁷ *Id.* at *4 (citing *Champion v. Mannington Mills, Inc.*, 538 F. Supp. 3d 1344 (M.D. Ga. 2021) and *Payne v. Woods Services, Inc.*, 520 F. Supp. 3d 670 (E.D. Pa. 2021); see also *Cupi v. Carle Bromenn Med. Ctr.*, No. 1:21-CV-01286, 2022 WL 808209, at *2 (C.D. Ill. Mar. 16, 2022).

¹³⁸ *Champion*, 538 F. Supp. at 1349.

¹³⁹ *Laguerre v. Nat'l Grid USA*, No. 20-3901-CV, 2022 WL 728819, at *1 (2d Cir. Mar. 11, 2022).

¹⁴⁰ *Arazi v. Cohen Bros. Realty Corp.*, No. 1:20-CV-8837-GHW, 2022 WL 912940, at *8 (S.D.N.Y. Mar. 28, 2022).

¹⁴¹ *DiFranco v. City of Chicago*, No. 21 C 1600, 2022 WL 672746, at *4 (N.D. Ill. Mar. 7, 2022) (allowing suit for failure to accommodate to survive motion to dismiss when plaintiff was at increased COVID risk due to his underlying health conditions).

¹⁴² *Hermes v. Okla. Arthritis Ctr.*, No. CIV-20-871-SLP, 2021 WL 3540322, at *4 (W.D. Okla. June 8, 2021).

¹⁴³ *Frederick v. Allor Mfg., Inc.*, No. 2:20-CV-12790-TGB-RSW, 2022 WL 598746, at *5 (E.D. Mich. Feb. 28, 2022).

severe anxiety about catching COVID-19 because of a family history of Guillain-Barre syndrome could qualify as a disability.¹⁴⁴

COVID risk is not, however, just a matter of the employee's underlying health conditions. COVID risk varies with the social circumstances: the strains of the virus in circulation, the infection rate and vaccination rate in the local community, and the conditions in which employees perform their jobs, to take just a few of the most important. These conditions are not medical and will not be captured by medical facts about the employee's condition. Knowing that the employee has diabetes and that diabetes increases the likelihood that a COVID infection will be severe is insufficient to capture actual risk, which will depend on the extent of community spread of COVID, the availability or efficacy of vaccinations, and the COVID variants in circulation. In holding that plaintiff's smoking and history of pneumonia were insufficient for disability, the court noted the import of social circumstances only to set them aside.¹⁴⁵ In rejecting plaintiff's claim, the court distinguished a decision in which the plaintiff's underlying cardiovascular system impairments—inoperable aortic valve disease, systolic heart failure, and a pacemaker—placed him at increased risk from COVID infection. In explaining the distinction, the court noted as a difference that the other court had considered the “totality of an individual's health circumstances in conjunction with their social circumstances” in determining whether COVID risk could constitute actual disability.¹⁴⁶ The court thus recognized that circumstances matter, only to set them aside.

Several other district courts have looked more expansively at the plaintiff's circumstances in deciding whether their underlying condition qualified them for COVID-related accommodations. For example, one plaintiff requested the accommodation of working from home during COVID because he had moderate asthma.¹⁴⁷ He alleged asthma as the impairment and breathing as the major life activity. The court reasoned that his claim could survive because, although asthma is not per se substantially limiting, plaintiff had brought evidence that he was under the care of several health providers for treatment, had comparatively frequent attacks despite following treatment recommendations, and was at higher risk of serious illness or death from COVID.¹⁴⁸ Whether

¹⁴⁴ *Russo v. Moore, Ingram, Johnson, & Steele, LLP*, 2022 WL 1787102, (M.D. Tenn. 2022), at *13.

¹⁴⁵ *Frederick*, 2022 WL 598746, at *4.

¹⁴⁶ *Id.* (distinguishing *Silver v. City of Alexandria*, 470 F. Supp. 3d 616, 622 (W.D. La. 2020)).

¹⁴⁷ *Peeples v. Clinical Support Options, Inc.*, 487 F. Supp. 3d 56, 63 (D. Mass. 2020).

¹⁴⁸ *Peeples*, 487 F. Supp. 3d at 63; *see also Silver*, 470 F. Supp. 3d at 621–22 (judging disability by the totality of the circumstances under COVID); *Valentine v. Collier*, No. 4:20-CV-1115, 2020 WL 3625730, at *2 (S.D. Tex. July 2, 2020).

COVID is a disability should be judged by the totality of the circumstances during the pandemic, this court said,¹⁴⁹ and we agree.

B. COVID as Regarded as Disability

Now take cases in which employees claim that their respective employers regarded them as disabled due to COVID-19. In these cases, plaintiffs cannot claim a right to accommodation such as staying home to quarantine or working at home¹⁵⁰ but may argue that they were subject to adverse action such as termination because of their employers' judgments about their condition. One kind of challenge that these plaintiffs will face is that employers could not have regarded them as having COVID if they were quarantining at home due to an exposure. It would create perverse incentives for plaintiffs to fail in such cases: the reason for quarantining is to avoid exposing others in the workplace in case the employee is ill with COVID.

But the case of Enny M. Alvarado, an accountant for ValCap, illustrates exactly these incentives.¹⁵¹ Alvarado had worked in close proximity to a symptomatic co-worker whom the employer required to continue to work while awaiting results of a COVID-19 test.¹⁵² When the co-worker's test came back positive, Alvarado's doctor ordered her to go home and quarantine for seven days. She informed her employer and requested COVID leave as a reasonable accommodation. The employer's representative told her how to request the leave, but after she requested it, the employer terminated her instead of granting the leave. Reportedly, the representative stated that the employer had texted that "anyone who went home due to COVID-19 was not permitted back and was not needed."¹⁵³ Alvarado could not claim actual disability and the accommodation; she had not become ill with COVID. The employer moved to dismiss Alvarado's ADA claim on the basis that she had not plausibly alleged regarded as disability and the court granted the motion. In the *Alvarado* court's view, Alvarado's fundamental problem was that her allegation that her employer knew of her co-worker's condition and her likely exposure did not permit the inference that the employer believed she had COVID and discharged her based on this belief.¹⁵⁴ On this court's reasoning, the employer must believe that the employee has

¹⁴⁹ *Peebles*, 487 F. Supp. 3d at 63.

¹⁵⁰ 42 U.S.C. § 12201(h).

¹⁵¹ See *Alvarado v. ValCap Grp., LLC*, No. 3:21-CV-1830-D, 2022 WL 19686, at *1 (N.D. Tex. Jan. 3, 2022).

¹⁵² *Id.* at *1.

¹⁵³ *Id.*

¹⁵⁴ *Id.* at *7.

the condition in question to regard the employee as disabled.¹⁵⁵ The employer's belief that the employee has been exposed to COVID will not suffice. Along the same lines, if an employer believes that an employee has COVID, but does not believe that the employee has long COVID, the employee will be unable to claim protection under the ADA.

Another potential problem for plaintiffs claiming regarded as disability is that their COVID infection is judged "transitory and minor." In a Third Circuit district court decision, for example, the plaintiff was fired by her employer after she reported a positive COVID-19 test and a loss of taste and smell and requested leave to self-isolate.¹⁵⁶ The court denied the employer's motion to dismiss on the ground that they had not regarded her as disabled but used reasoning that portends problems for people claiming they were regarded as disabled based on their COVID-19 infection. Under the reasoning of the EEOC technical assistance, the court said, the plaintiff could only have claimed actual disability if her infection had been sufficiently severe, which apparently it was not. Her employer argued that she could not come under the regarded as prong because her condition was in fact transitory and minor. The court disagreed: "[a]ccordingly, in light of the disclosures that Matias made to Terrapin involving her positive COVID-19 test and her disclosure of symptoms common to certain forms of COVID-19 that can carry longer term impairment of major life function, Matias has plausibly alleged that Terrapin regarded her as having an impairment that can substantially limit major life functions."¹⁵⁷ Presumably, if Matias had had a COVID infection without loss of taste or smell, or if she had failed to notify the employer's representative of this symptom, she would have failed in her argument that the employer regarded her as disabled and the court would have dismissed her ADA claim.

Following the reasoning of the *Matias* court, employees who are fired for mild COVID infections will not gain disability anti-discrimination protection as actually disabled; they will also not gain protection as regarded as disabled unless they can bring evidence of COVID's longer-term impact on a major life activity such as the bodily function of taste or smell.¹⁵⁸ At least one court, however, has emphasized that the employer must show that the COVID infection was *both* transitory

¹⁵⁵ *Id.*

¹⁵⁶ *Matias v. Terrapin House, Inc.*, No. 5:21-CV-02288, 2021 WL 4206759, at *4 (E.D. Pa. Sept. 16, 2021); *see also* *Brown v. Roanoke Rehab. & Healthcare Ctr.*, No. 3:21-CV-00590-RAH, 2022 WL 532936, at *6 (E.D. Ala. Feb. 22, 2022) (finding that an employee could plead regarded as discrimination when she informed her employer of ongoing severe symptoms of COVID).

¹⁵⁷ *Matias*, 2021 WL 4206759, at *4.

¹⁵⁸ We wonder if these rulings will create incentives, or at least signals, for employees with mild COVID cases, including omicron and BA2 variants, to return to work and infect others despite their sensible misgivings.

and minor and that assessing each of these is a fact intense inquiry not appropriately resolved at summary judgment which may only be granted in the absence of genuine material issues of fact.¹⁵⁹

Ironically, several courts have allowed plaintiffs' cases to continue when their employer contends that they could not have regarded them as disabled because they did not think their COVID was a serious illness. One plaintiff was terminated after he informed his employer that he was sick with a sore throat and fever.¹⁶⁰ This plaintiff survived a motion to dismiss on a claim of that he had been regarded as disabled; the court reasoned that under the ADAAA plaintiffs do not need to allege the employer's belief that the employee's condition substantially limits a major life activity.¹⁶¹ Another plaintiff faced an employer who said that he did not regard him as disabled because it was unproven that the employee's underlying health condition put him at greater risk from COVID.¹⁶² In this case, the employee had had open heart surgery several years earlier and asked for three weeks off because he was experiencing COVID symptoms. His employer laid him off because he was not willing to take responsibility for an employee with increased COVID risks. In refusing to grant the employer's motion to dismiss, the court reasoned that the relevant inquiry under the ADAAA for regarded as disability is how the employer perceived the plaintiff not whether the plaintiff's condition affected a major life activity.¹⁶³

C. Actual Disability: Long COVID as an Ambiguous Diagnosis

Few decisions as of yet concern long COVID itself. One district court in the Third Circuit concluded that a plaintiff who had COVID and was sufficiently recovered for his physician to permit him to leave quarantine, but who continued to be treated for COVID-related symptoms, could qualify under both the actual (severe infection) and regarded-as (continuing treatment that might last six months) prongs of the definition of disability.¹⁶⁴ A different district court in that circuit

¹⁵⁹ Booth v. GTE Fed. Credit Union, No. 8:21-CV-1509-KKM-JSS, 2021 WL 5416690, at *5 (M.D. Fla. Nov. 20, 2021); *see also* Guerrero v. Summit Aerospace, Inc., No. 21-CV-24006, 2022 WL 579499, at *4 (S.D. Fla. Feb. 25, 2022) (declining to decide whether COVID is transitory and minor at the summary judgment stage when plaintiff fired two weeks after returning from a quarantine due to COVID exposure).

¹⁶⁰ Fortun v. iAero Thrust LLC., No. 21-CV-23348, 2022 WL 446209, at *1 (S.D. Fla. Feb. 14, 2022).

¹⁶¹ *Id.* at *5.

¹⁶² Kim v. Friends Tek, LLC, No. 1:20-CV-4276-AT-JSA, 2020 WL 11885523, at *8 (N.D. Ga. Dec. 21, 2020), *report and recommendation adopted*, No. 1:20-CV-4276-AT-JSA, 2021 WL 4839090 (N.D. Ga. Jan. 8, 2021).

¹⁶³ *Id.*

¹⁶⁴ Burbach v. Arconic Corp., No. 2:20-CV-00723-CRE, 2021 WL 4306244, at *7 (W.D. Pa. Sept. 22, 2021).

dismissed a complaint of discrimination based on both actual and regarded as disability brought by a plaintiff who had been discharged for failing to return to work during his quarantine period for COVID and contended that he had been diagnosed with COVID, reasoning that he had not brought evidence of the severity or length of his disease or that his employer regarded him as disabled.¹⁶⁵

VII. SIGNIFICANCE OF THE SOCIAL MODEL OF DISABILITY FOR AMBIGUOUS DIAGNOSES

As suggested above, some courts take a physical reductionist approach to long COVID through which only those few individuals who possess biomarkers corroborating the diagnosis will be accorded protected status as individuals with disabilities under federal anti-discrimination law. This methodology is in contravention of the ADA's intention to be more inclusive of conditions rising to a level of coverage. In consequence, a disjuncture arises between how courts understand actual disability for purposes of legal protection and how long COVID is diagnosed. Further, a significant gap arises under the ADA in legal responses to long COVID whereby those individuals who experience COVID for less than six months are not deemed qualified for coverage as functionally disabled individuals, and those people who might be regarded as disabled due to long COVID are ineligible to receive reasonable accommodations.

The judicial response to understanding the relationship of long COVID to the ADA's disability classification has utilized a medical model of disability as expressed through physical reductionism. Pathologizing disability as a biological impairment that can be verified only through a diagnosis established by agreed-upon biomarkers, rather than through the experiences of those with long COVID, instantiates disability as an inherently fixed, objectively and uniformly quantifiable phenomenon. It also reaffirms a medical model preference in leaving the process of defining disability to medical experts epistemically preferred by courts rather than accepting the views of the lived experience of the stakeholders themselves—persons with disabilities.

By contrast, a social model of disability looks at the relationship of impairment to the environment to understand disability. In that view, what is primarily disabling is the social construction of the world whereby societies make affirmative non-inherent choices in design and programming that exclude or include certain types of individuals, not the medical assessment of an individual's body or mind. According to

¹⁶⁵ *Payne v. Woods Servs., Inc.*, 520 F. Supp. 3d 670, 679 (E.D. Pa. 2021) (plaintiff's claim for interference with FMLA leave did survive motion to dismiss, however).

the social model of disability, disability itself is an evolving and fluid concept, one that is subject to evolving notions and understandings of “normalcy” versus variation of the human condition. Thus, we embrace conditions as falling within the disability category in relation to developing social understandings. To illustrate with one example, before the digital revolution, repetitive stress disorder was largely understood as the manifestation of repeated manual activities, such as those performed by Supreme Court litigant Etta Williams in an automobile assembly line.¹⁶⁶ Repetitive stress disorder is now most frequently associated as a byproduct of tendon damage arising from keyboard usage, and carpal tunnel syndrome is a commonly understood term both medically and socially.¹⁶⁷ The world of 2022 is replete with reliance on and frequent usage of keyboards and other typing technology (such as thumb-driven communication via iPhones), hence related injuries receive social recognition and empathy as a by-product of accessing our increasingly digital world. One can therefore imagine in the near future a similar degree of social cognition regarding the existence and implications of long COVID, both as a disabling phenomenon and as an ordinarily recognized form of disability. Such an understanding would track acceptances of other impairments as disabilities, for instance, PTSD and increasingly other mental health issues.

Currently, we are just scratching the surface as to COVID’s collateral damage, with long COVID being one effect among several.¹⁶⁸ Whether people who have been infected with COVID experience different rates of illness or disability later in life remains to be seen. In future years we are also likely to associate the pandemic with other conditions, some of which have easily identifiable biomarkers and some of which do not. These impairments can include: PTSD, depression, anxiety disorder, trauma, chronic obstructive pulmonary disease (COPD), and multisystem inflammatory syndrome (in both its adult and child-specific manifestations), among others. A comprehension of long COVID better grounded in a social model understanding of disability would acknowledge the sequela of long COVID—including fatigue, bodily pain, shortness of breath—as disabling both in reality and for the purposes of legal protection, rather than seeking to verify it biologically with medical measurements.

¹⁶⁶ *Toyota Motor Mfg., Ky., Inc. v. Williams*, 534 U.S. 184, 197 (2002).

¹⁶⁷ *Computer-Related Repetitive Stress Injuries*, JOHNS HOPKINS, <https://www.hopkinsallchildrens.org/Patients-Families/Health-Library/HealthDocNew/Computer-Related-Repetitive-Stress-Injuries> [<https://perma.cc/M6X2-5RJU>].

¹⁶⁸ Rachel L. Levine, *Addressing the Long-term Effects of COVID-19*, *JAMA* 328(9), 823–24 (2022), <https://jamanetwork.com/journals/jama/fullarticle/2795139> [<https://perma.cc/NYE9-ZS2C>].

Approaching long COVID in this manner moves us beyond biologically reductionist proofs of disability typical of the medical model and shifts our socio-legal understanding into the more important normative goal of preventing discrimination on the basis of disability. This is because the question then becomes “what prejudices exist and how do we remove them” rather than the old and tired (and in theory, ADA-eviscerated) investigations into whether the plaintiff is “really” disabled and thus legally (and morally) worthy of protection from subordination. Such a shift would make the ADA more of a “living document” and move away from jurists and others who aver that only what is contained within the four corners of any statute, including the ADA, can be viewed as dispositive. It acknowledges that precisely because disability is an evolving concept, every possible manifestation of disability must be verifiable via biomarkers and listed within its governing statute. This mode of statutory interpretation has averred, for example, that the internet is not an ADA-recognized place of accommodation because it is not listed in the original statute, despite the ADA having been passed in 1990 prior to the digital revolution. A social understanding of the world that includes disability has an opposite view and instead embraces evolving socially cognized conditions. Operating from the opposite baseline whereby the disability category is promulgated in a rigid and instantiated laundry list and must be “proven” by access to unestablished biomarkers omits on the one hand the social aspects of the employee’s condition or need for accommodations and, on the other hand, the possibility of the employee’s being considered disabled at all. Doing so also evokes a misconception of the body: namely, that capabilities are bodily.

One proposal for diagnostic criteria for long COVID includes symptoms developing after a probable COVID-19 infection, lasting for more than 12 weeks, not explained by an alternative diagnosis, and reflecting the concurrence of multisystem clusters that may change over time.¹⁶⁹ Within these criteria, patients’ experiential accounts are given precedence over laboratory-based findings and are in harmony with ethics discussions cautioning physicians to listen carefully to patients with possible long COVID diagnoses.¹⁷⁰ These diagnostic criteria are very much in line with a social model account of disability.

¹⁶⁹ Antoni Sisó-Almariell et al., *Long Covid-19: Proposed Primary Care Clinical Guidelines for Diagnosis and Disease Management*, 18 INT’L. J. ENV’T RSCH. & PUB. HEALTH 4350 (2021).

¹⁷⁰ Dorothy Wall, *The Importance of Listening in Treating Invisible Illness and Long-Haul COVID-19*, 23 AM. MED. ASS’N J. ETHICS 590 (2021).

VIII. CONCLUSION

Long COVID claims for disability-related employment discrimination have been met by physical reductionism during determinations of disability. Difficult to diagnose due to an absence of agreed-upon physiologically observed biomarkers, and liable to elude ADA coverage and/or eligibility for reasonable workplace accommodations, long COVID illustrates a misunderstanding of the relationship between disability, bodily function, and disability anti-discrimination law. Although the ADAAA was intended to extend the range of people considered to be disabled for purposes of disability anti-discrimination law, including bodily system function as a major life activity in the amended statute has contributed to problematic physical reductionism in disability determinations as demonstrated in recent federal court decisions. To remedy this discordance, we suggested how social understandings of the body and disability, congruent with the ADAAA, can counter misleading reductionism about ambiguously diagnosed conditions as disabilities, including long COVID.