Telehealth and Telework Accessibility in a Pandemic-Induced Virtual World

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Introduction

During the spring of 2020, the COVID-19 crisis began to unfold in the U.S. Legal scholars exploring the impact of the pandemic on people with disabilities focused much of their attention on triage protocols. These scholars debated the legality and ethics of using patient disability as a basis for rationing ventilators in the face of then-looming ventilator shortages at hospitals.² At least initially, stay-at-home orders across the

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² Compare, e.g., Samuel R. Bagenstos, May Hospitals Withhold Ventilators from COVID-19 Patients with Pre-Existing Disabilities? Notes on the Law and Ethics of Disability-Based Medical

country were successful in "flattening the curve" and reducing the demand for ventilators.3 However, the pandemic's widespread disruption of American life caused broader, unexpected consequences for people with disabilities.4

Jasmine Harris has described disability law's inability to keep up with these consequences as the "frailty" of disability rights, noting that the enforcement of disability laws effectively become "optional and aspirational" in the face of an emergency. 5 These rollbacks of civil rights form part of a broader, "widespread attack" on disability rights.6

This essay explores one dimension of disability law's COVID-related "frailty": how the pandemic has undermined equal access to employment and healthcare for Americans who are deaf, hard of hearing or DeafBlind as healthcare and employment migrate toward telehealth and telework activities. This essay's authors—a clinical law professor, a policy attorney for a national organization representing Americans who are deaf, hard of hearing or DeafBlind, and a computer scientist – have collaborated over the past months on detailed advocacy documents that will help deaf patients and employers navigate the complex new circumstances of telehealth and telework. This essay presents a brief survey of some of the

Rationing, 130 YALE L.J. FORUM ___, at *3 (2020) (arguing that disability-based triage distinctions violate the Americans with Disabilities Act and other laws), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3559926 with Govind Persad, Disability Law and the Case for Evidence-Based Triage in a Pandemic, 130 Yale L.J. Forum ___, at *2 (2020) (arguing that disability-based triage is "legally and ethically preferable" to other methods), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3571139.

³ See, e.g., N.Y. TIMES, Government Projections Indicate a Summer Spike in US Coronavirus Infections if Stay-at-Home Orders are Lifted, CHI. TRIB. (Apr. 10, 2020, 3:57 PM) ("The models show a higher demand for ventilators in the short term if states had never issued the stay-at-home orders."), https://www.chicagotribune.com/coronavirus/ct-nw-nytcoronavirus-summer-spike-20200410-gcthujs5azg4vjr6bw3uvpgkeq-story.html [https://perma.cc/GT2P-5H87].

⁴ See generally Jasmine E. Harris, The Frailty of Disability Rights, 169 U. PA. L. REV. ONLINE 29 (2020) (describing rationing problems for people with disabilities in the contexts of education, housing, and employment), https://www.pennlawreview.com/wpcontent/uploads/2020/07/Harris_Final-1.pdf [https://perma.cc/SQ3B-ZEBP].

⁵ *Id.* at 32–33.

⁶ See Danielle Citron and Mary Anne Franks, Cyber Civil Rights in the Time of COVID-19, HARV. L. REV. BLOG (May 14, 2020), https://blog.harvardlawreview.org/cyber-civilrights-in-the-time-of-covid-19/ [https://perma.cc/TBH8-TMQN]; Sarah Katz, The Inaccessible Internet, SLATE FUTURE TENSE (May 22, 2020, 12:14 PM), https://slate.com/technology/2020/05/disabled-digital-accessibility-pandemic.amp [https://perma.cc/C6MZ-FJT3].

difficult legal and technical issues we have encountered in healthcare and workplace accessibility for Americans who are deaf, hard of hearing or DeafBlind in the pandemic-induced virtual world.

Telehealth and telework activities typically rely on videoconferencing platforms including Zoom, WebEx, Google Meet, Adobe Connect, GoToMeeting, Microsoft Teams, and others—including some proprietary applications used for telehealth—instead of in-person communication.⁷ These platforms have accessibility problems because they presume that all users can see, hear, and speak verbal English.

As a result, many deaf and hard of hearing users require captions, American Sign Language (ASL) interpretation, and other services to participate on equal terms in video conferences for telehealth and telework. But videoconferencing platforms do not provide captioning, ASL, and similar accessibility services as baseline features. Regardless of whether a deaf or hard of hearing person is an employer and/or employee in a telework scenario or is a doctor and/or patient in a telehealth scenario, someone typically must make separate arrangements for captioners, ASL interpreters, and other services to make real-time video meetings accessible.⁸

Ignorance of the needs of patients and employees,⁹ coupled with the perceived logistical and financial costs of procuring accommodations such

⁷ The authors collaborated on drafting an accessibility evaluation of several popular videoconferencing platforms in May 2020. *See generally Video Conferencing Platforms Feature Matrix*, Deaf/Hard of Hearing Technology Rehabilitation Engineering Research Center (May 29, 2020), https://www.deafhhtech.org/rerc/videoconferencing-platforms-feature-matrix/ [https://perma.cc/JG3N-USML].

⁸ Some platforms deploy automatic speech recognition (ASR) technologies to provide automatic captions in limited and experimental circumstances. *See* Tanya Basu, *The Pandemic Made Life Harder for Deaf People. The Solutions Could Benefit Everyone.*, MIT TECHNOLOGY REVIEW (May 28, 2020) (describing impending automatic captioning functionalities being developed for and added to Zoom and Google Meet), https://www.technologyreview.com/2020/05/28/1002314/clear-mask-captioning-live-transcription-deaf-coronavirus-pandemic/ [https://perma.cc/435D-MFW2].

⁹ See Harris, supra note 4, at 30 ("Simply put, society continues to misunderstand disability — what it means, who the category includes or excludes, its relationship to impairment, its valence and construction as an identity."); Michael Ashley Stein, Labor Markets, Rationality, and Workers with Disabilities, 21 BERKELEY J. EMP. & LAB. L. 314, 333 (2000) (describing "... a society-wide absence of accurate information about the circumstances and capabilities of people with disabilities."); Michael A. Schwartz, Limits on Injunctive Relief Under the ADA: Rethinking the Standing Rule for Deaf Patients in the Medical Setting, 11 J. HEALTH CARE L. & POL'Y 163, 166 n.13 (2008) ("[B]arriers to heath

as captioning and interpreting services,¹⁰ lead many employers and doctors to disregard accessibility.¹¹ For example, as an anonymous patient explained to one of the authors:

I had COVID-19 symptoms after arriving back from a ski trip . . . (that is, I had a consistent fever, cough, difficulty breathing, etc.) and was scared witless. One evening, I decided to use my provider's stand-alone app for after-hours unscheduled video appointments and to my surprise the instructions simply said that the app was accessible to a screenreader [which the interviewee does not use]. I had no choice but to try to mime with the telehealth provider and was given some dubious advice which I think I misunderstood (6 or 8 Advil every 6 hours, I think).¹²

As a result, many deaf and hard-of-hearing employees and patients are left with no choice but to fend for themselves by pursuing legal actions under disability law.

Of course, the need for access to captioning and interpreting services in teleconferencing is not new, and disability law has intervened often in healthcare and employment to provide that relief. Deaf and hard-of-hearing people have long relied on the Americans with Disabilities Act (ADA) to guarantee accessibility of in-person healthcare (typically under Title III of the ADA and associated Department of Justice regulations)¹³

care for Deaf patients include . . . that doctors may not understand the communication needs and preferences of Deaf patients.").

¹⁰ See Stein, supra note 9, at 319 ("existing misconceptions about disabled workers that substitute for less easily obtainable accurate information tend to sway estimates of indicators that are meant to signal appraisals of productivity and accommodation cost."); Michael A. Schwartz, Deaf Patients, Doctors, and the Law: Compelling A Conversation About Communication, 35 FLA. St. U. L. Rev. 947, 1000 (2008) ("Deaf patients will no longer accept the argument that their requests are a burden to the medical provider's budget").

¹¹ See generally Robert L. Burgdorf Jr., The Americans with Disabilities Act: Analysis and Implications of a Second-Generation Civil Rights Statute, 26 HARV. C.R.-C.L. L. REV. 413 (1991) (enumerating instances of employment discrimination against people with disabilities); see also Schwartz, supra note 10.

¹² Letter from anonymous author to Zainab Alkebsi (on file with author).

¹³ See 47 U.S.C. §§ 12182(a) (2020) (barring "a place of public accommodation" from discriminating against people with disabilities), 12181(7)(F) (defining public

and employment (under Title I of the ADA and associated Equal Employment Opportunity Commission regulations). 14

Healthcare and workplace accessibility typically happens through the provision of "auxiliary aids and services" that are necessary to ensure "effective communication" between patients and doctors and "reasonable accommodations" for employees. Auxiliary aids and reasonable accommodations for deaf and hard-of-hearing patients and employees typically include ASL interpreters (either in-person or via video remote interpreting (VRI) services) and transcription services such as Communication Access Real-time Translation (CART), as well as provision of assistive listening devices, video phones, and other associated equipment. (Title II of the ADA, Section 504 of the Rehabilitation Act, and various other state and federal disability laws may also bear on some types of employment and healthcare scenarios, though a full discussion of their application is beyond the scope of this Essay.)¹⁷

accommodations to include "pharmac[ies]...professional office[s] of a health care provider, [and] hospital[s]."), 12182(b)(2)(A)(ii)–(iii) (including in the ambit of prohibited discrimination "a failure to make reasonable modifications in policies, practices, or procedures" and "a failure to take such steps as may be necessary to ensure that no individual with a disability is excluded, denied services, segregated or otherwise treated differently than other individuals because of the absence of auxiliary aids and services"). See generally Schwartz, supra note 10.

¹⁴ See 42 U.S.C. §§ 12112(a) (barring employers from discriminating against people with disabilities in a variety of employment contexts), 12112(b)(5)(A) (including within the ambit of prohibited discrimination a failure to make "reasonable accommodations" available to an employee with a disability), 12111(9)(B) (defining "reasonable accommodation" to include the "acquisition or modification of equipment or devices" and "the provision of qualified . . . interpreters").

 $^{^{15}}$ See 42 U.S.C. § 12103(1); 28 C.F.R. §§ 36.303(b)(1), (c) (2020) (Department of Justice regulation defining the scope of "auxiliary aids" and "effective communication" under Title III).

¹⁶ 29 C.F.R. § 1630.2(o)(2)(ii) (regulations of the Equal Employment Opportunity Commission (EEOC) defining the related concept of "reasonable accommodation[s]," which include "the provision of qualified . . . interpreters; and other similar accommodations for individuals with disabilities.").

¹⁷ We note briefly that the application of Title II to telehealth offerings administered by state and local governmental entities – such as many hospitals – does not raise the same jurisdictional issues that are implicated by the Title III analysis that follows. We also note that Section 1557 of the Patient Protection and Affordable Care Act extends the non-discrimination provisions of Section 504 to some private healthcare entities – namely those that receive federal funding, including via participation in state healthcare insurance exchanges – that might otherwise be covered only under Title III. *See* 42 U.S.C. § 18116(a).

Despite these long-standing protections, the applicability of the ADA to telehealth and telework contexts is open to question. When real-world activities move to virtual reality, legal actions seeking accessibility in telehealth and telework will encounter a familiar set of legal issues that arise in disability law:

- 1. **Jurisdiction and Responsibility.** Do the disability laws that apply to the real-world healthcare and employment activities apply to the corresponding activity in virtual space? If disability law applies, does it hold doctors or employers responsible for ensuring accessibility, or does some responsibility shift to the new virtual platform—e.g., a videoconferencing service—for compliance with the disability law? If disability law does not apply, might telecommunications law provide a substitute?
- 2. **Remedies.** If disability law applies, what are the available remedies, and are they sufficient to afford functionally equivalent communication for deaf and hard-of-hearing patients and employees so that they can receive comparable healthcare and do their work on equal terms?

I. Jurisdiction and Responsibility for Telehealth and Telework Accessibility

Telehealth and telework activities in many respects seem not only similar to, but substitutive for, real-world healthcare and employment activities. However, the jurisdictional application of the relevant provisions of the ADA and its associated regulations becomes murky as activity shifts from the real world to the virtual and communications become intermediated through third-party videoconferencing platforms that are traditionally the domain of telecommunications law. This section addresses the possibility of imposing accessibility obligations on healthcare providers, employers, and videoconferencing platforms under Title III and Title I of the ADA and Federal Communications Commission (FCC) regulations.

A. Telehealth Accessibility under Title III of the ADA

The dynamic of disability law's struggle with the physical-to-virtual shift is most obvious in the application of Title III of the ADA to telehealth. Title III applies to brick-and-mortar doctors' offices as "places

of public accommodation." ¹⁸ But does it apply to those same doctors' telehealth offerings when a patient does not physically go to the office? That is, can telehealth be conceptualized as a "place of public accommodation," thereby requiring an administering doctor to ensure that it is accessible to patients who are deaf or hard of hearing? Or, alternatively, can a third-party videoconferencing platform being *used* for telehealth be conceptualized as a "place of public accommodation," thereby requiring the *platform* to make its services accessible to people with disabilities?

While there is not yet any significant Title III case law on telehealth offerings, the long-running circuit split over the applicability of Title III to websites is instructive. As one of us previously described it, there are roughly three interpretations of applicability of Title III to websites:

- 1. Standalone-Websites-Are-Places Circuits: Courts in the First, Second, and Seventh Circuits have established that even standalone websites are sufficiently comparable to brick-and-mortar places and can be treated as places of public accommodation.¹⁹
- 2. Websites-Are-Not-Places Circuit: Courts in the Third Circuit have established that websites, even those with a nexus to a physical place of public accommodation, cannot be treated as public accommodations.²⁰
- 3. Nexus Circuits: Courts in the Ninth and Eleventh Circuits have established that standalone websites are not places public accommodations, but can become subject to Title III if they have a sufficient nexus to a physical place of public accommodation—such as an online ordering website for a retail establishment.²¹

¹⁸ See discussion supra, note 13.

¹⁹ Blake E. Reid, *Internet Architecture and Disability*, 95 IND. L.J. 591, 599 & n.48–49 (2020) (internal citations omitted) (describing a variety of First, Second, and Seventh Circuit Title III cases treating standalone websites as places)

²⁰ See id. at 599 & n.50

²¹ See id. at 598 & n.47 (2020) (internal citations omitted) (describing a variety of Ninth and Eleventh Circuit Title III cases applying the nexus test).

These interpretations follow courts' differing conceptions of the "metaphysical place-ness of websites." ²² That is, they turn on whether a court—like those in a *websites-are-not-places* circuit—identifies physicality as the heart of "places" under Title III, or instead—like those in a *standalone-websites-are-places* or *nexus* circuit— is willing to accept a conception of "places" that is partially or wholly virtual. ²³

It seems likely that courts in both *standalone-websites-are-places* and *nexus* circuits will be willing to treat telehealth offerings from healthcare providers as Title III eligible places of public accommodation as well. This is likely the case for two reasons:

- a. *Comparability to In-Person Healthcare*. Telehealth offerings effectively substitute virtual interaction with a doctor, through the videoconferencing platform, that is functionally equivalent to the interaction that would have happened between the doctor and the patient in the doctor's office.²⁴ The only difference is that the doctor may face barriers in using diagnostic tools or operative measures that require physical contact with the patient.
- b. *Nexus to Doctors' Offices*. Likewise, most telehealth services are provided by doctors with physical offices, and courts willing to recognize the websites of retail establishments as having an important connection to the goods and services provided by the brick-and-mortar store seem likely to recognize that the provision of telehealth is directly related to the principal businesses of brick-and-mortar doctors' offices.²⁵

Conversely, it seems less likely that courts in *nexus* circuits will be willing to treat videoconferencing platforms—as opposed to doctors

²² Id. at 604.

²³ Id. at 607.

²⁴ Of course, this analysis may be complicated as exclusively telehealth-offering providers begin to proliferate in the wake of COVID.

²⁵ But see Abdulmajid Asiri et al., The Use of Telemedicine in Surgical Care: a Systematic Review, 26(3) ACTA INFORM MED 201 (2018),

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6195401/ [https://perma.cc/5CAA-N2F4] (describing the use of telemedicine in surgical care). One of the authors recently experienced the use of videoconferencing platforms during office visits as patient, during which a doctor initially met face-to-face and then switched over to consulting via Zoom from different rooms at the doctor's office to minimize the risk of COVID-19 exposure.

themselves—as Title III eligible places of public accommodations, though it is possible that courts in *standalone-websites-as-places* jurisdictions might take a different approach. This is because videoconferencing platforms are often offered for general-purpose communication functionality, not specifically for medical use. This is also because videoconferencing platforms lack a connection to or even a clear point of comparison to a specific real-world service. That is, in-person interactions are not typically intermediated by a third-party service that conveys audio and visuals of each side of a conversation from one location to another. (The authors do not necessarily endorse the *nexus* interpretation of Title III and would oppose its application to deny deaf and hard-of-hearing patients access to telehealth.)

It also seems unlikely that courts in a *websites-are-not-places* circuit will treat either doctors' telehealth offerings or videoconferencing platforms as Title III eligible places of public accommodation. This is because a patient simply is not physically entering a doctor's office, but rather sitting at her home or somewhere else. (We do not endorse the *websites-are-not-places* interpretation of Title III and would oppose its application to deny deaf and hard-of-hearing patients access to telehealth.)

Table 1: Likely Coverage by Circuit of Telehealth Offerings and Videoconferencing Platforms under Title III of the ADA

	Doctor's Telehealth Offerings	Videoconferenc ing Platforms
Standalone- Websites-As-Places Circuits	Likely covered	Unclear
Websites-Are-Not- Places Circuit	Likely not covered	Likely not covered
Nexus Circuits	Likely covered	Likely not covered

The applicability of Title I of the ADA to telework situations, though also largely unaddressed by the courts, is more straightforward. This is because Title I does not regulate "places of employment" or use some other place-centric definition, but rather focuses on the employer-

employee relationship, imposing obligations on "employers"²⁶ to make reasonable accommodations for their "employees."²⁷ While the definitions of these terms categorically exclude some small employers from Title I's ambit, likely in both real-world and virtual contexts alike,²⁸ it is not obvious that either definition hinges on whether employment happens in person at a physical location or remotely via videoconference.²⁹

B. Telework Accessibility under Title I of the ADA

The relatively straightforward application of Title I to employers in telework situations breaks down when it comes to imposing accessibility obligations on videoconferencing platforms themselves. This is because it is highly unlikely that the typical user of a videoconferencing platform will have any conceivable employment relationship with the platform provider.

* * *

Title III of the ADA is likely amenable (in some circuits, but not all) to a reading that imposes accessibility obligations on healthcare providers offering telehealth services. Title I of the ADA is likely amenable to a reading that imposes accessibility obligations on employers of sufficient size in all circuits. However, there are significant barriers to applying Title III or Title I to place direct responsibility on videoconferencing companies to insure for access to telehealth or telework platforms for deaf and hard-of-hearing individuals.

²⁶ See 42 U.S.C. § 12111(2) (including "employer" in the definition of a "covered entity" under Title I).

²⁷ See 42 U.S.C. § 12112(b)(5)(A) (requiring covered entities to make reasonable accommodations for "employees"

²⁸ 42 U.S.C. § 12111(4) defines "employee" as "an individual employed by an employer; Section 12111(5)(A) defines "employer," in relevant part, as "a person engaged in an industry affecting commerce who has 15 or more employees for each working day in each of 20 or more calendar weeks in the current or preceding calendar year, and any agent of such person;" Section 12111(7) defines "person" as having the same meaning as the term in 42 U.S.C. § 2000e; and Section 2000e(a) broadly defines "person" as including "one or more individuals, governments, governmental agencies, political subdivisions, labor unions, partnerships, associations, corporations, legal representatives, mutual companies, joint-stock companies, trusts, unincorporated organizations, trustees in cases under Title 11, or receivers."

²⁹ See id.

C. Telehealth and Telework Accessibility Under Telecommunications Law

Notwithstanding the uncertain application of the ADA to videoconferencing platforms, there is some possibility of imposing responsibility for accessibility on videoconferencing platforms under telecommunications law. In particular, FCC regulations under the advanced communications services (ACS) provisions of the Communications Act of 1934 ('34 Act), added by the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA), might in principle vest the FCC with the power to tackle the accessibility problems with videoconferencing platforms.

Unfortunately, the FCC's implementation of the ACS regulations, which remains in procedural limbo nearly a decade after the Commission first implemented the regulations, currently imposes no accessibility requirements on videoconferencing platforms. However, the possibility that the FCC *could* regulate might still give rise to preclusion challenges against ADA litigation over the accessibility of videoconferencing platforms.

As a historical matter, Section 255 of the '34 Act, added by the Telecommunications Act of 1996,³¹ requires providers of "telecommunications services" to make them "accessible to and usable by individuals with disabilities,"³² under regulations jointly developed by the FCC and the Architectural and Transportation Barriers Compliance Board.³³ However, the scope of "telecommunications services," in relevant

³⁰ 47 U.S.C. §§ 617-618.

³¹ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat 56.

³² 47 U.S.C. § 255(c).

³³ See 47 U.S.C. § 255(e).

part, has been limited to basic voice telephone services,³⁴ leaving videoconferencing as a largely unregulated "information service."³⁵

In the CVAA, Congress opened the door to remedying the shortcomings of Section 255 by creating a new category of "advanced communications services" (ACS) that includes within its scope "interoperable video conferencing service." ³⁶ The CVAA requires "providers" of ACS to ensure that they are "accessible to and usable by individuals with disabilities." ³⁷ In a 2011 Report and Order (the "2011 ACS Order"), the FCC first adopted regulations implementing the ACS provisions of the CVAA.³⁸

The 2011 Order helpfully concluded that "services and equipment that provide real-time video communications, including audio, between two or more users, are 'video conferencing services'"³⁹ and formally defined the term "interoperable video conferencing service" to mean "a service that provides real-time video communications, including audio, to enable users to share information of the user's choosing."⁴⁰ The definition in the rules is broad enough to cover videoconferencing services such as Zoom, which provide video and audio communications between two or more users.

However, the 2011 ACS Order effectively undercut the applicability of the ACS rules to modern videoconferencing services because of a debate

³⁴ 47 U.S.C. § 153(53) (defining "telecommunications service" as "the offering of telecommunications for a fee directly to the public"); (50) (defining "telecommunications as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received"); see USTA v. FCC, 825 F.3d 674, 690–91 (D.C. Cir. 2016). The scope of "telecommunications services" is presently in flux as litigation over the inclusion of broadband Internet access services under the term proceeds. See generally Mozilla Corp. v. FCC, 940 F.3d 1 (D.C. Cir. 2019); Order on Remand, Lifelink and Link Up Reform and Modernization, No. 11-42 (Oct. 27, 2020), https://www.fcc.gov/document/fcc-respondsnarrow-remand-restoring-internet-freedom-order-0 [https://perma.cc/5WGC-HN2F].

³⁵ See 47 U.S.C. § 153(24) (defining "information service").

³⁶ 47 U.S.C. § 153(1)(D); 47 C.F.R. § 14.10(c) (the parallel definition of "advanced communications services" in the FCC's implementing regulations).

^{37 47} U.S.C. § 617(b).

³⁸ Report and Order and Further Notice of Proposed Rulemaking, *Implementation of Sections 716 & 717 of the Commc'ns Act of 1934*, 26 FCC Rcd. 14,557 (2011) [hereinafter 2011 ACS Order].

³⁹ *Id.* at 14,578.

⁴⁰ 47 C.F.R. § 14.10(m).

over the inclusion of the unclear modifier "interoperable" in the CVAA's accessibility requirements for "interoperable video conferencing services." ⁴¹ The FCC concluded that the word "interoperable" could not be read out of the statute and had to be given contextual meaning. ⁴² The FCC also considered and rejected the possibility that the word "interoperable" was a *requirement* for videoconferencing services to be interoperable with each other or that interoperability could be treated as a subset of the statute's requirements that ACS be accessible and usable. ⁴³ This meant that the term "interoperable" had to be read as a limitation on the scope of covered videoconferencing services — i.e., that its rules only apply to those videoconferencing services that are interoperable, and not those that are not interoperable. ⁴⁴

While concluding that the term "interoperable" in the statute had to mean *something*, the Commission could not resolve and punted to a Further Notice of Proposed Rulemaking (FNPRM) what the term actually meant, teeing up three possible definitions of "interoperable" video conferencing services:

- 1. those that are "able to function inter-platform, inter-network, and inter-provider";
- 2. those that "having published or otherwise agreed-upon standards that allow for manufacturers or service providers to develop products or services that operate with other equipment or services operating pursuant to the standards"; and/or
- 3. those that are "able to connect users among different video conferencing services, including VRS [video relay service]." 45

Nearly a decade later, the Commission has yet to resolve the scope of "interoperable" or rule on the ACS FNPRM. A Second Report and Order

⁴¹ The CVAA refers to "interoperable videoconferencing services." 47 U.S.C. § 153(1)(D) (emphasis added).

⁴² 2011 ACS Order, 26 FCC Rcd. at 14,577.

⁴³ Id.

⁴⁴ The Commission affirmed this conclusion in a 2012 report to Congress. *See Implementation of Sections 716 & 717 of the Commc'ns Act of 1934*, 27 FCC Rcd. 12,204, 12,222 (2012) ("There may, however, still be many accessibility barriers to new communications technologies that fall *outside the scope of the CVAA*, including, for example, *video conferencing services that are not interoperable."* (emphasis added)).

⁴⁵ Id. at 14,686.

on the ACS rules issued in 2013 made no reference to the dispute over the scope of "interoperable."⁴⁶ Another Report and Order in 2016 expounded at length on the term "interoperability" in the context of accessibility rules for Real-Time Text (RTT),⁴⁷ but made no reference to videoconferencing or the pending "interoperable" dispute from the ACS FNPRM. The FCC's 2016 biennial report to Congress on the ACS rules acknowledged that the dispute and the FNPRM remained "pending";⁴⁸ the 2018 biennial report made no mention of the dispute or the FNPRM.⁴⁹ And in addition to the uncertain scope of "interoperable" video conferencing services, the FCC left unresolved in the ACS FNPRM the details of what it even means for an interoperable videoconferencing service to be "accessible."⁵⁰

As long as the FNPRM on the scope of "interoperable" remains pending, it is unlikely that the FCC's rules can be leveraged to impose

⁴⁶ Implementation of Sections 716 & 717 of the Commc'ns Act of 1934, 28 FCC Rcd. 5957 (2013).

⁴⁷ Transition from TTY to Real-Time Text Technology, 31 FCC Rcd. 13,568, 13,584–86 (2016).

⁴⁸ Biennial Report to Congress, *Implementation of Sections 716 & 717 of the Commc'ns Act of* 1934, 31 FCC Rcd. 11,065, 11,070 n.34 (2016), https://www.fcc.gov/document/2016-cvaa-biennial-report. The Commission similarly alluded to the pendency of the FNPRM in the 2014 Report to Congress. *Implementation of Sections 716 & 717 of the Commc'ns Act of* 1934, 29 FCC Rcd. 11,909 n.242 (2014) (acknowledging a commenter's position that "the Commission has not resolved the issue of how to define the term 'interoperable'").

⁴⁹ Biennial Report to Congress, *Implementation of Sections 716 & 717 of the Commc'ns Act of 1934, 33* FCC Rcd. 9828 (2018), https://www.fcc.gov/document/2018-cvaa-biennial-report [https://perma.cc/ELA5-FZ4G].

^{50 2011} ACS Order, 26 FCC Rcd. at 14,686-87 ("[W]hat does 'accessible to and usable by individuals with disabilities' mean in the context of interoperable video conferencing services and equipment? Are accessibility performance and other objectives different for 'interoperable' video conferencing services?"). The Rehabilitation Engineering Research Centers on Universal Interface & Information Technology Access (RERC-IT) and Telecommunications Access (RERC-TA) proposed objective testable performance criteria for ACS accessibility, but the FCC punted them to the FNPRM and has yet to be formally incorporate them into the rules. Id. at 14,690. The lack of clarity on the meaning of "accessibility" means that, even if the FCC's rules were formally applied to videoconferencing platforms, it would remain uncertain whether the platforms would be required to support the inclusion of sign language interpreters, captioning, or text communications. About half of the platforms surveyed in the Video Conferencing Platforms Feature Matrix, supra note 10, do not even provide for at least some of their plans dial-in numbers that are necessary to allow deaf and hard-of-hearing users to use third-party relay services, and some platforms have usability or feature limitations on text communications. The FCC also raised as-yet unresolved questions in the FNPRM about the relationship between videoconferencing accessibility and the relay system. See 2011 ACS Order, 26 FCC Rcd. at 14,690 n.781. For further discussion of the relationship between videoconferencing accessibility and the relay system, see discussion infra Part III.

accessibility obligations on videoconferencing platforms like Zoom. Moreover, the FCC's failure to resolve the "interoperable" issue not only limits the scope of the FCC's rules, but raises the prospect of an array of preclusion issues in any litigation to apply the ADA to videoconferencing platforms.

The FCC implied in the 2011 ACS Order that the CVAA might preclude the use of a private right of action, like the ADA, against conduct that might violate the ACS rules,⁵¹ likely alluding to Section 255's express disclaimer of a private right of action to enforce Section 255 or the FCC's implementing regulations.⁵² The FCC's implication is questionable, given that the ACS provisions of the CVAA do not have an express bar on private enforcement like Section 255 does.

Nevertheless, the lack of resolution and unclear scope of the "interoperable video conferencing rules" means that any ADA litigation over videoconferencing platforms could lead to primary-jurisdiction challenges. The primary-jurisdiction doctrine, "applies where a claim is originally cognizable in the courts" but "requires the resolution of issues which, under a regulatory scheme, have been placed within the special competence of an administrative body," in which case "the judicial process is suspended pending referral of such issues to the administrative body for its views."⁵³

As a result, a court contemplating the application of the ADA to a videoconferencing platform might refer the question back to the FCC for resolution of the presently uncertain scope of the "interoperable video conferencing rules." When the FCC ultimately resolves the scope of the rules, exhaustion challenges to ADA claims might arise if the scope of the rules is interpreted to cover videoconferencing platforms such as Zoom,⁵⁴

⁵¹ 2011 ACS Order, 26 FCC Rcd. at 14,676 n.736 (acknowledging a commenters' assertion of "the CVAA's preclusion of a private right of action").

⁵² See 47 U.S.C. § 255(f). Courts have read the exclusion of a private right of action in Section 255 and the inclusion of one in other parts of the '34 Act to prohibit reading other sections of the Act as including a private right of action — though none have explicitly applied this reasoning to the ACS provisions of the CVAA. See, e.g., Sastin 2, LLC v. Hemingway Ass'n, No. CV-17-1252-D, 2018 WL 6059398, at *2 (W.D. Okla. Nov. 19, 2018). But cf. G v. Fay Sch., Inc., 282 F. Supp. 3d 381, 394–95 (D. Mass. 2017) (rejecting the assertion of Section 255(f) against the application of the ADA to claims of radiofrequency sensitivity) (subsequent history omitted).

⁵³ United States v. W. Pac. R.R. Co., 352 U.S. 59, 64 (1956).

⁵⁴ See id.

or field-preemption challenges if not.⁵⁵ While such challenges might fail depending on the FCC's ultimate response, the uncertainty and possibility of delay is likely to stand as a barrier to ADA litigation against videoconferencing platforms.

II. Remedies for Telehealth and Telework Accessibility

Articulating the details of how to overcome the accessibility shortcomings with telehealth and telework is a critical policy priority. However, the lack of clarity surrounding the disability and telecommunications law sources of jurisdiction for requiring telehealth and telework to be accessible—as well as the uncertainty about whether telehealth and telework accessibility should ultimately be the responsibility of employers/healthcare providers, videoconference platform providers, or some combination of both—it is difficult to predict what specific remedies might ultimately be imposed by courts or regulators.

This difficulty is exacerbated by the fact videoconferencing platforms have typically been treated under disability law as auxiliary aids or accommodations *in and of themselves*, rather than as offerings that need to be made accessible. That is, videoconferencing platforms are typically offered to ensure the accessibility of in-person healthcare and employment, so guidance under disability law does not tend to contemplate scenarios where platforms themselves might both be *required* by a healthcare provider as a condition of obtaining healthcare or by an employer as a condition for employment. For example, the Department of Justice's regulations for video remote interpreting (VRI) services contemplate necessary features of videoconferencing services that a place of public accommodation selects to provide a remote interpreter for an in-

interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject.'") (internal citations omitted).

⁵⁵ See generally Hillsborough Cty., Fla. v. Automated Med. Labs., Inc., 471 U.S. 707, 713 (1985) ("Congress' intent to pre-empt all state law in a particular area may be inferred where the scheme of federal regulation is sufficiently comprehensive to make reasonable the inference that Congress 'left no room' for supplementary state regulation. Pre-emption of a whole field also will be inferred where the field is one in which 'the federal

person service, but do not guarantee or require that any particular videoconferencing platform itself will be accessible.⁵⁶

In the face of the lack of guidance from judicial sources, the authors of this essay helped draft a series of practical guides,⁵⁷ backed by a consensus of a coalition of deaf, hard-of-hearing, and DeafBlind consumer-advocacy organizations and subject-matter experts, to facilitate the accessibility of both telehealth⁵⁸ and telework.⁵⁹ These guides illustrate a range of options for courts and agencies to consider in implementing accessibility requirements after the jurisdictional questions in the first section have been resolved.

While this essay does not reiterate all the details of the guides, the guides tee up three overlapping categories of options for addressing the

⁵⁶ 28 C.F.R. § 36.303(f); *see* Burns v. West Virginia Dep't of Educ. and Arts, 242 W. Va. 392, 399–400 (2019) (discussing when telework may be a reasonable accommodation under Title I of the ADA).

⁵⁷ Though this Essay does not necessarily represent the views of these organizations, we note here that Prof. Reid contributed to the guides on behalf of his client, Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI), Ms. Alkebsi on behalf of her employer the National Association of the Deaf (NAD), and Dr. Vogler on behalf of the Gallaudet University Technology Access Program (TAP).

⁵⁸ NAT'L ASS'N OF THE DEAF, *COVID-19: Guidelines for Healthcare Providers – Video-Based Telehealth Accessibility for Deaf and Hard of Hearing Patients* (Apr. 17, 2020) ("Accessible Telehealth Guidelines"), https://tdiforaccess.org/covid-19/healthcare/ and https://www.nad.org/covid19-telehealth-access-for-providers/ [https://perma.cc/KP4X-PCZ3]. The authors also developed a version of the Accessible Telehealth Guidelines geared toward patients. NAT'L ASS'N OF THE DEAF, *COVID-19: Video-Based Telehealth Accessibility for Deaf and Hard of Hearing Patients* (April 17, 2020), https://tdiforaccess.org/covid-19/telehealth-guide/ [https://perma.cc/82EA-4FX2] and https://www.nad.org/covid19-telehealth-access-for-deaf-hard-of-hearing/ [https://perma.cc/G63H-WAUD]. However, the remainder of this Essay refers exclusively to the guide for healthcare providers.

⁵⁹ NAT'L ASS'N OF THE DEAF, *Remote Workplace Communications Access: Recommendations for Employers During Times of Expanded Telework* (May 29, 2020) ("Accessible Telework Recommendations), https://www.nad.org/remote-workplace-communications-accessfor-employers/ [https://perma.cc/TM5D-V6RD] and https://www.deafhhtech.org/rerc/remote-workplace-communications-access/ [https://perma.cc/N7SS-CPWT]. As with the Accessible Telehealth Guidelines, the authors also developed a version of the Accessible Telework Recommendations geared toward employees. NAT'L ASS'N OF THE DEAF, *Accessible Remote Work Meetings for Deaf and Hard of Hearing Employees* (May 29, 2020), https://www.nad.org/accessible-remote-work-meetings-for-dhhemployees/ [https://perma.cc/NY7U-RPQZ] and https://www.deafhhtech.org/rerc/accessible-remote-work-meetings-for-deaf-and-hard-of-hearing-employees/ [https://perma.cc/7KLB-FQ53]. However, the remainder of this Essay likewise refers exclusively to the recommendations for employers.

accessibility of videoconferencing in telehealth and telework contexts that may be applicable to both telehealth and telework:

- Healthcare Provider/Employer Responsibility. Disability law
 might seek to hold healthcare providers and employers
 responsible for arranging for auxiliary aids and reasonable
 accommodations, such as ASL interpreters and CART
 providers, for deaf and hard-of-hearing patients and
 employers. This approach might:
 - create a relatively limited role for videoconferencing platforms, which would need only to ensure that they both provide text communication options and functionally accommodate and interoperate interpreters and CART providers—i.e., that their user interfaces accommodate having interpreters on the screen—and potentially a non-existent role where a telehealth provider uses a proprietary telehealth system;
 - ensure that healthcare providers and employers could engage specialized interpreters and CART providers with the subject-matter knowledge necessary to convey complex medical jargon and other technical subjectmatter and terminology that might be necessary for some jobs;
 - raise questions about the choices and autonomy of patients and employees to select the services that work best for them;⁶⁰

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⁶⁰ DOJ Title III regulations specify that healthcare providers "should" consult patients with disabilities "whenever possible" to determine the patients' preferences for auxiliary aids or services, but leave to healthcare providers "the ultimate decision as to what measures to take." See 28 C.F.R. § 36.303(c)(1)(ii). Contra 28 C.F.R. § 35.160(b)(2) (requiring healthcare entities covered under Title II of the ADA to "give primary consideration to the requests of individuals with disabilities" when "determining what types of auxiliary aids and services are necessary"); see also Nondiscrimination in Health Programs and Activities, 81 Fed. Reg. 31,375-01, 31,421 (May 18, 2016) (Department of Health and Human Services regulations applying the Title II "primary consideration" standard to all healthcare entities receiving federal funding under Section 1557 of the Patient Protection and Affordable Care Act). See generally Schwartz, supra note 10 (describing in detail the disconnect between Title II and Title III of the ADA on the issue of consultation and urging reform to DOJ's Title III regulations).

- allocate the costs of accessibility primarily to healthcare providers and employers; and
- raise significant challenges for enforcement, which would have to be done on a healthcare provider-byprovider and employer-by-employer basis and leave patients and employees little recourse for shortcomings in the quality of services provided by third-party interpreters and CART providers.
- Videoconferencing Platform Responsibility. Disability law might also or in addition hold video conferencing platforms themselves responsible for making all videoconferences accessible. This approach might:
 - raise questions about whether and to what extent healthcare providers, patients, employers, and employees could personalize or otherwise play a role in choosing the accessibility features offered by particular videoconferencing platforms, or whether they would have to effectuate patient and employee choice solely by choosing among platforms;
 - o place significant pressure on automated speech recognition (ASR), computer vision, and other algorithmic technologies that would translate verbal speech, text, and sign language. Videoconferencing platforms would likely turn to these technologies in any effort to make videoconferencing accessible at scale. ASR technologies have progressed significantly over the past decade but still have significant quality shortcomings that cause them to make critical mistakes, while computer vision and related technologies that accurately translate between ASL and spoken English are still impractical;⁶¹

⁶¹ See Emily Matchar, Sign Language Translating Devices Are Cool. But Are They Useful?, SMITHSONIAN MAG. (Feb. 26, 2019),

https://www.smithsonianmag.com/innovation/sign-language-translators-are-cool-but-are-they-useful-180971535/ [https://perma.cc/6TWN-446L]; Michael Erard, Why Sign-Language Gloves Don't Help Deaf People, ATLANTIC (Nov. 9, 2017),

https://www.theatlantic.com/technology/archive/2017/11/why-sign-language-gloves-dont-help-deaf-people/545441/ [https://perma.cc/FH3X-2KNR].

- for platforms relying on automated technologies, be less likely to easily allow for specialized transcription of medical jargon and other technical subject matter, thereby undercutting the suitability of the platforms for telehealth and many telework applications;
- allow for the allocation of some (potentially significant)
 portion of the costs of accessibility to videoconferencing
 platform providers; and
- simplify enforcement by centralizing at least some responsibility for accessibility in a small handful of videoconferencing platforms.
- Telecommunications Relay Service. A third approach would facilitate accessibility through the Telecommunications Relay Service. 62 Administered by the FCC63 and funded with contributions from telecommunications providers, 64 the relay system encompasses a variety of technologies that allow deaf and hard-of-hearing users to complete phone calls including Video Relay Service (VRS) which allows signing users to communicate through a sign language interpreter using a camera and screen-equipped videophone or smartphone applications; Internet Protocol Captioned Telephone Service (IP CTS) which allows hard-of-hearing users to supplement call audio with captions; and various other services. 65 Relying on the relay system would:
 - allocate a limited role for either videoconferencing platforms or healthcare providers and employers;
 - place pressure on but also afford some additional autonomy to – patients and employees, who would have to, and could, select and register for a service of their choosing;

⁶² See generally FCC, Telecommunications Relay Service – TRS, https://www.fcc.gov/consumers/guides/telecommunications-relay-service-trs [https://perma.cc/68PH-74MZ] (last visited June 27, 2020).

^{63 47} U.S.C. § 225(b)(1), (d).

^{64 47} U.S.C. § 225(d)(3).

⁶⁵ See Telecommunications Relay Service, supra note 62.

- limit the possibilities for people to seek out specialized interpreters versed in medical jargon and other technical subject matter;⁶⁶
- allocate costs through a broad-based funding mechanism that is already designed to work at scale, but in a way that would add significant and unexpected demand, because the FCC's rules currently bar the use of relay services to facilitate interpretation or transcription for in-person healthcare and employment scenarios;⁶⁷
- lead to additional complexity and cognitive overload as some patients and employees join videoconferences both via relay service and via video, placing pressure on them to use two separate screens — one for the relay service and one for the videoconference and multiplying the number of participants in a videoconference when multiple conferees join via relay;⁶⁸ and
- simplify enforcement by leaving oversight of the relay system in the hands of the FCC, which currently handles and adjudicates complaints against relay providers.⁶⁹

These options, which are not necessarily mutually exclusive – display tradeoffs in:

⁶⁶ The FCC's regulations nominally require relay Communications Assistants (CAs) to be "qualified interpreters" that can use "any necessary specialized vocabulary." *See* 47 C.F.R. § 64.604(a)(1)(iv). In practice, many interpreters do not possess the necessary skills to interpret complex conversations involving medical, legal, technical, or other specialized topics.

⁶⁷ See Reminder that Video Relay Services (VRS) Provides Access to the Telephone System Only and Cannot be Used as a Substitute for "In-Person" Interpreting Services or Video Remote Interpreting (VRI), 20 FCC Rcd 14528 (2005).

⁶⁸ It is possible that the FCC could both reduce this complexity and the attendant costs of multiple communications assistants (CAs) joining a conference by allowing relay services to interoperate directly with videoconferencing platforms, allowing one or two CAs to provide signing or transcription for all users on a conference. However, even if this is allowed, videoconferencing platforms still may need to implement the "hooks" for supporting this interoperability, an issue that could be resolved as part of the resolution of the meaning of the term "accessible" for interoperable videoconferencing services raised in the 2011 ACS FNPRM. *See* discussion *supra*, note 50.

⁶⁹ See 47 C.F.R. § 64.602.

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- who carries the responsibility and costs of insuring accessibility;
- how much autonomy people with disabilities retain in selecting accessibility technologies that work for them;
- how easily each approach can be enforced;
- how easily each approach can adapt to specialized situations;
 and
- other considerations.

Conclusion

This essay underscores how disability law's focus on the real-world leaves disability rights fragile when the law must suddenly apply to the virtual world. While disability and telecommunications law ultimately may be leveraged to increase accessibility in telehealth and telework, jurisdictional uncertainty leaves open questions for how patients and workers can vindicate their rights to accessible healthcare and employment during the pandemic. Policymakers should consider these issues—as well as the diverse array of remedial choices for the accessibility of telehealth and telework—as they tackle these problems in consultation with the deaf, hard-of-hearing, and DeafBlind communities.