

THE DIGITAL FUTURE OF HEALTHCARE:
EMERGING TRENDS IN TELEHEALTH
TECHNOLOGY

KEYNOTE SPEAKERS:

PROFESSOR STACEY TOVINO, *UNIVERSITY OF OKLAHOMA
COLLEGE OF LAW*

DR. DAVID CHARLES, *MEDICAL DIRECTOR, VANDERBILT
TELEHEALTH*

[edited for reading]

OCTOBER 9, 2020

Casey Goggin: Hello. Good morning, afternoon now, and welcome to the Belmont College of Law Health Law Journal 2020 Fall Panel. My name is Casey Goggin, and I am the Editor-In-Chief of the Health Law Journal. On behalf of the journal and the college of law I would like to start by saying thank you for all of you for being here, panelists, audience, everybody, thank you so much. I would like to start by making a few housekeeping announcements. Today's event counts as one free hour of CLE and normally we would hand out the CLE form, but like many things this year we are going to have to do things a little differently. At the end of today's event, we will go ahead and send you a Google link which you will have to fill out. Our managing editor, Joey Kennedy, will go into that in more detail later as to how that process is going to go down. We will also have our symposium director fielding questions in the chat box. So, if you have any questions just direct them that way and she will direct them either to our presenters or to our moderator. So, without further ado, we're going to start with our presentations.

We have two presentations today. The first of which is from Professor Stacey Tovino, from the University of Oklahoma College of Law. Professor Tovino currently serves as a professor of law at the University of Oklahoma. She is a leading expert in Health Law, Bio-Ethics, and Medical Humanities. She has been educated both as an attorney and a medical humanist. Her interdisciplinary research has been in case books, textbooks, encyclopedias, and medical and science journals, in addition to a variety of law review journals including Alabama Law Review, Notre Dame Law Review, Iowa Law Review, Washington and Lee Law Review, Minnesota Law Review, and Boston College Law Review. Her current research focuses on patient privacy and health information confidentiality, Covid-19 and the law, mental health law, and health technology and the law. She is a frequent speaker on the local, national, and international level. Prior to joining the faculty at the University of Oklahoma, Professor Tovino served as a professor of law and was the founding director of the health law program at the University of Nevada Las Vegas William S. Boyd School of Law where she received the top-tier award. She also has more than two decades of law practice experience, representing a broad range of healthcare providers in civil, regulatory, operational, and financial matters. Professor Tovino graduated magna cum laude from Tulane university and magna cum laude from the University of Houston Law center and earned her PhD with distinction from the University of Texas medical branch. Thank you so much Professor Tovino for being here I'm going to go ahead and kick it off to you.

Professor Tovino: Thank you so much. Let me just share my screen. Am I okay to go now?

Casey Goggin: Yes, Ma'am.

Stacey Tovino: Alright, well thank you very much for allowing me to be here and a thank you to Belmont Health Journal for letting me join this Fall 2020 Panel. Today, I wanted to talk about the rapid and unprecedented deregulation of telehealth and telemedicine during the Covid-19 pandemic. Let me provide some background before I do that. Many of know that on January 31 of this year Secretary of HHS, Alex Azar, formally determined that a public health emergency, or PHE, existed.¹ Although, we most certainly do not need a presidential proclamation of a national, or nationwide emergency, before the secretary of HHS can declare that a public emergency exists, we all know than on March 13 of this year, President Donald Trump proclaimed that there was a nationwide emergency concerning the Covid-19 disease.²

What I want to show you today is that in light of this determination and this proclamation, as well as many other similar state determinations and proclamations, as well as federal state agency decisions, we have had a situation that has resulted in the rapid and unprecedented deregulation of telemedicine or telehealth in the United States. Just to show you what my state, the state of Oklahoma defines as telemedicine, in Oklahoma we define telemedicine as a practice of healthcare delivery, diagnosis, consultation, evaluation and treatment by means of a two-way, real time interactive communication system. What I am going to do today in my remaining thirteen-or-so minutes is talk about eight illustrative examples of telehealth of telemedicine deregulation and/or expansion. They include: Telemedicine payment parity, they include an expansion of what we call qualifying or eligible

¹ U.S. DEPT. OF HEALTH & HUMAN SERVS., *Determination that a Public Health Emergency Exists*, <https://www.phe.gov/emergency/news/healthactions/phe/Pages/2019-nCoV.aspx> (last updated Jan. 31, 2020).

² National Conference of State Legislatures, *President Trump Declares State of Emergency for COVID-19* (Mar. 25, 2020), <https://www.ncsl.org/ncsl-in-dc/publications-and-resources/president-trump-declares-state-of-emergency-for-covid-19.aspx>.

originating sites, they include an expansion of what we might call qualifying or eligible telecommunication systems.³ They include an expansion or, what I should say, reduction or removal of in-person medical examination requirements, an expansion of the services that are eligible for provision through telehealth, an expansion of the set of providers or we might say the class of providers who are eligible to deliver services through telehealth, removal of certain in-state licensure requirements, and changes in privacy and security requirements. What I'll do is go through them quickly, one by one, and the first change I want to talk about related to telemedicine payment parity.

Historically, and traditionally, many public healthcare programs and private plans reimburse telehealth at a lower rate compared to in-person visits. The first change that I want to show you is, during the Covid-19 pandemic, many of our healthcare programs and private plans have increased the amount that they have reimbursed providers for telehealth as compared to in-person visits in an attempt to further reduce these prior telehealth payment disparities. So, if you look right here you can see the Centers for Medicare and Medicaid Services (CMS) within the federal department of health and human services increasing the rate that they pay providers for seeing Medicare beneficiaries via telehealth.⁴ It used to be between fourteen and forty-one dollars per visit and now it is about forty-six to one hundred ten dollars per visit.⁵

Just to give you another illustrative example, here is Governor Phil Murphy in the state of New Jersey, and here he is directing the New Jersey department of banking and insurance to ensure that the rates of payment made to in-network providers for services delivered via telemedicine and telehealth are not lower than the rates established by the care for services delivered via tradition

³ Okla. Health Care Auth., *OHCA Policies and Rules: Telehealth* (Sept. 14, 2020), <https://oklahoma.gov/ohca/policies-and-rules/xpolicy/medical-providers-fee-for-service/general-provider-policies/general-scope-and-administration/telehealth.html>.

⁴ CTRS. FOR MEDICARE & MEDICAID SERVS., *Trump Administration Issues Second Round of Sweeping Changes to Support U.S. Healthcare System During COVID-19 Pandemic* (Apr. 30, 2020), <https://www.cms.gov/newsroom/press-releases/trump-administration-issues-second-round-sweeping-changes-support-us-healthcare-system-during-covid>.

⁵ *Id.*

or what we call in-person methods.⁶ Just to give you one last example, here in United Healthcare, on their website, talking about how they're going to temporarily reimburse providers for telehealth services at their contracted rate for in-person services, so I would say the first big kind of deregulation or telemedicine expansion was made possible by the implementation at the public healthcare program and at the private health plan level of either telemedicine payment mandates or the further implementation of telemedicine payment parity.⁷

Now the second change that I want to talk about relates to qualifying or what we might call originating sites. Historically, many of us know that public healthcare programs, as well as private health plans, frequently require insureds who want to have their telehealth visits reimbursed to be located at certain originating sites. So, for example, if you look at this older regulation, 42 C.F.R. Sec 410.78(b)(3).⁸ What this regulation does is require Medicare beneficiaries, if they wish their telehealth services to be reimbursed, to be located at certain originating sites and you can see these at the top of the slide, like the Rural Health Clinic or Critical Access Hospital, but only if they are located, if you look at the bottom of the slide, in something that we call an HPSA which is a health professional shortage area or in a county that is located outside a metropolitan statistical area, or in some other geographically designated area. We call these originating sites. What I want you to know here is that during the Covid-19 pandemic many public healthcare programs and private plans have temporarily waived these originating site requirements.

So, just for example, this is the Coronavirus Preparedness and Response Supplemental Regulations Act of 2020 and President

⁶ STATE OF N. J. DEPT. OF HUMAN SERVS., *Governor Murphy Announces Departmental Actions to Expand Access to Telehealth and Tele-Mental Services in Response to COVID-19* (Mar. 22, 2020), <https://www.nj.gov/humanservices/news/press/2020/approved/20200323.html> [hereinafter "Governor Murphy Announces"].

⁷ United Healthcare, *COVID-19 Telehealth*, <https://www.uhcprovider.com/en/resource-library/news/Novel-Coronavirus-COVID-19/covid19-telehealth-services/covid19-telehealth-services-telehealth.html> (last updated Jan. 11, 2020) [hereinafter "COVID-19 Telehealth"].

⁸ 42 C.F.R. §410.78.

Trump signed this piece of legislation into law on March 6 of this year, and within this law at section 102 we see that the secretary of HHS has the authority now to temporarily waive certain requirements relating to telehealth, including those originating sites or what we'll call site of service requirements, which the secretary of HHS did.⁹ Just to give you a state example, this is the state of New Jersey, and I am just using New Jersey as an example because I am originally from New Jersey, but here is New Jersey Medicaid similarly or in a parallel fashion waiving originating site or site of service requirements for telehealth allowing both New Jersey licensed clinicians to provide telehealth from any location and allowing individuals in New Jersey to receive services via telehealth also from any location.¹⁰ Just to give you a private example, here is a screenshot from United Healthcare's website doing the same thing.¹¹ So, they are saying for all of their individual and fully insured group market health plans they are waiving their originating site requirements during the public health emergency.

Now the third change, that I want to talk about, to telemedicine that has happened during the Covid-19 pandemic is, what I call, the kind of deregulation or the approval or additional qualifying or eligible telecommunication systems. As background, many of you know that both public healthcare programs and private plans traditionally, where they would reimburse a telehealth visit, would require the provider and the patient to use certain interactive telecommunications systems. Defined as two-way, real-time, interactive communications between patients and either the physician or the practitioner.¹² If you look at the bottom of this older regulation, this is pre Covid-19, see how they exclude telephones, fax machines, and mail systems from this definition of approved or eligible interactive telecommunication systems?¹³ What I want you to know here is that during the Covid-19 pandemic, many public healthcare programs and private payors have backed off these

⁹ Coronavirus Preparedness & Response Supplemental Appropriations Act, 2020, PL 116-123, March 6, 2020, 134 Stat 145.

¹⁰ Governor Phil Murphy, *Governor Murphy Announces Department Actions to Expand Access to Telehealth and Tele-Mental Health Services in Response to COVID-19* (Mar. 22, 2020),

<https://www.nj.gov/governor/news/news/562020/20200322b.shtml>.

¹¹ COVID-19 Telehealth, *supra* note 7.

¹² 42 C.F.R. §410.78.

¹³ *Id.*

stringent definitions of approved or eligible telecommunication systems. You have state Medicaid agencies, as well as private payors; so, here for example, is the New Jersey governor saying that for New Jersey Medicaid he is going to permit the use of alternative technologies, including technologies available on smartphone devices.¹⁴ And just to give you a Blue Cross and Blue Shield of North Carolina example, here is a screenshot from Blue Cross and Blue Shield's website basically saying that for either providers or members who don't have access to secure video systems, telephones, meaning audio-only visits, can be used instead.¹⁵

The fourth change or the fourth kind of expansion or deregulation of telemedicine that I wanted to talk about relates to in-person medical examination or medical evaluation requirements. Historically, we all know that many Federal and State laws, as well as public healthcare programs and private health plans, required the first visit between a physician or another practitioner and a patient, meaning the visit that established the physician-patient relationship, and the visit that must occur before certain therapeutics are prescribed. They require that to occur in person and we see that all over federal law, state law, we see it again in our public healthcare programs, we see it in our private health plans. And, what I wanted you to know is, that several federal and state agencies, as well as public health plans and private health plans have backed off the medical in-person medical examination or in-person medical evaluation requirements before the physician-patient relationship can be assumed to exist, and/or before a particular therapeutic can be prescribed. Just as one example, here is the DEA explaining that it's allowing the DEA registered practitioners to prescribe controlled substances without having to interact in-person with their patients because, of course, in person interactions do risk the spread of SARS Cov-2.¹⁶ Just to give you another example, here is the DOJ and DEA also telling practitioners that they have the flexibility during the

¹⁴ Governor Murphy Announces, *supra* note 6.

¹⁵ BlueCross BlueShield of N.C., *COVID-19: Additional Details About Relief Efforts* (Mar. 3, 2020), <https://www.bluecrossnc.com/provider-news/covid-19-additional-details-about-relief-efforts#search=detailed%20COVID-19>.

¹⁶ DRUG ENFORCEMENT ADMIN., *How to Prescribe Controlled Substances to Patients During the COVID-19 Public Health Emergency*, [https://www.deadiversion.usdoj.gov/GDP/\(DEA-DC-023\)\(DEA075\)Decision_Tree_\(Final\)_33120_2007.pdf](https://www.deadiversion.usdoj.gov/GDP/(DEA-DC-023)(DEA075)Decision_Tree_(Final)_33120_2007.pdf) (last visited Feb. 15, 2021).

public health emergency to prescribe a particular medication assisted treatment for opioid abuse disorder which is viewed as an endorphin to new existing patients with opioid abuse disorder via telephone without requiring those practitioners to first conduct an examination of the patient in person.¹⁷

Now the fifth change that I wanted to talk about relates to the services that are eligible to be provided through telehealth or telemedicine. Historically, we all know that public healthcare programs, as well as private health plans, have limited the types of services that can be delivered through telehealth or telemedicine and prefer that a certain list of services actually be delivered in person. What I want you to know here is that during the Covid-19 pandemic many health programs and private health plans have increased the number and type of healthcare services that can be delivered through telehealth or telemedicine compared to an in-person visit. Now, this isn't a great illustration, but this is a screenshot of the Center for Medicare and Medicaid Services one page, and if you actually click on the link in the middle of the slide it will take you to a not very pretty, which is why I didn't link to it, excel spreadsheet.¹⁸ On that excel spreadsheet is a vastly expanded list of healthcare services that can be furnished through telehealth and that would be payable onto the Medicare physician fee schedule.¹⁹ Since I am in Oklahoma today, and because I work at the University of Oklahoma, I thought I would give you an Oklahoma Medicaid example, but as you can see here is Oklahoma healthcare authority, which oversees our Oklahoma Medicaid program is explaining that it is allowing the expanded use of telehealth for basically any service that can be provided safely through secure telehealth communication devices for Sooner Care.²⁰ Sooner Care is just Medicaid for Oklahoma Medicaid members.

¹⁷ Thomas Prevoznik, *DEA Qualifying Practitioners DEA Qualifying Other Practitioners*, U.S. DEPT. OF JUSTICE: DRUG ENFORCEMENT ADMIN. (Mar. 31, 2020), [https://www.deadiversion.usdoj.gov/GDP/\(DEA-DC-022\)\(DEA068\)%20DEA%20SAMHSA%20buprenorphine%20telemedicine%20\(Final\)%20+Esign.pdf](https://www.deadiversion.usdoj.gov/GDP/(DEA-DC-022)(DEA068)%20DEA%20SAMHSA%20buprenorphine%20telemedicine%20(Final)%20+Esign.pdf).

¹⁸ CTRS. FOR MEDICARE & MEDICAID SERVS., *List of Telehealth Services*, <https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/Telehealth-Codes> (last updated Jan. 14, 2021).

¹⁹ *Id.*

²⁰ OKLA. HEALTH CARE AUTH., *Expanded use of telehealth and telephonic services during COVID-19*,

Now the sixth thing I wanted to talk about, and only two, or three from the end, is how during the Covid-19 pandemic, both public health programs and private plans expanded the class of practitioners or providers who are eligible to provide healthcare services through telehealth. Historically, many of us know that our private health programs and private plans would only allow certain healthcare providers, for example, allopathic and osteopathic physicians, maybe physician assistants, and certain registered nurse practitioners to provide services via telehealth, but what I wanted you to know here is that many public healthcare programs, and private health plans, are owing an expanded class of healthcare practitioners to provide services through telehealth. So here you can see, for example, that the Centers for Medicare and Medicaid Services is broadening the class, or range, of practitioners who can provide services through telehealth and that this broadened class includes physical therapists, occupational therapists, and speech language pathologists, just to name a few.²¹ To give you another private payor example, here is a screenshot from the BlueCross BlueShield of Illinois website, and if you look in that orange box that's about two-thirds of the way down the side, these are all of the classes or types of healthcare providers who can provide healthcare services through telehealth as opposed to in-person visits and that would be able to get reimbursed from BlueCross BlueShield of Illinois.²²

Alright, the seventh change I wanted to talk about relates to in-state licensure requirements. Historically or traditionally, all of us know that many public health care programs, private payors, as well as state licensing agencies, would require physicians and other healthcare practitioners, who wanted to provide services through

<https://oklahoma.gov/ohca/providers/telehealth/state-emergency-for-covid-19.html> (last updated Dec. 10, 2020).

²¹ CTR. FOR MEDICAID & MEDICARE SERVS., *Physicians and Other Clinicians: CMS Flexibilities to Fight COVID-19*, <https://www.cms.gov/files/document/covid-19-physicians-and-practitioners.pdf> (last updated Jan. 28, 2021) [hereinafter “CMS Flexibilities”].

²² BlueCross BlueShield of Ill., *COVID-19 Preparedness Answers to Frequently Asked Questions (FAQs) from Providers*, https://www.bcbsil.com/pdf/education/covid19_provider_faq.pdf (last updated Jan. 2021).

telehealth, to be actually licensed to practice medicine or their health care profession in the state where the individual who is on the receiving end of the telehealth resided or was located. But during the COVID-19 pandemic, many of our public healthcare programs, our private payors, as well as our state licensing laws have been either waived or amended to allow healthcare practitioners who are currently, and validly, and in good standing licensed in some state to provide telehealth services to residents or individuals who are located in other states, even if that practitioner doesn't happen to be located in what I call that recipient patient state.

So just to give you an example, here's a Centers for Medicare and Medicaid Services explaining that it wants to offer several flexibilities that help fight COVID-19, and you can see that the Centers for Medicare and Medicaid Services is temporarily waiving the Medicare and Medicaid requirement that physicians, as well as non-physician practitioners, be licensed in the state where they're providing services.²³ And just to give you a state example, as opposed to a CMS example, this is just a screenshot of the number of a bill in the state of New Jersey. And if you read this bill, what it would say is that due to the COVID-19 crisis in New Jersey, which of course many of us know is a COVID hotspot, the state of New Jersey is not going to require practitioners who wish to provide telehealth services to New Jersey residents to be licensed to practice medicine or health in the state of New Jersey.²⁴

And then the last change that I wanted to talk about relates to privacy and security. Historically, we all know that many federal and state statutes and regulations stringently regulate certain uses and disclosures of certain individually identifiable health information in terms of privacy and security. And, what I did want you to know, is that many federal agencies and state agencies that enforce these privacy and security laws have either issued notices of enforcement discretion, as you can see right here, or have just kind of clarified what their existing laws look like during the COVID-19 pandemic. So, for example this is the Office for Civil Rights within the federal Department of Health and Human Services, and here in

²³ CMS Flexibilities, *supra* note 21, at 8.

²⁴ New Jersey Assembly Bill 3860, 219th Legislature, <https://legiscan.com/NJ/text/A3860/id/2173336>.

October they issued a notification of enforcement discretion for certain telehealth remote communications during the nationwide public health emergency.²⁵ And basically, what they said here is that health care providers who engage in the good faith provision of, not public, but non-public facing telehealth.²⁶ They are not going to get in trouble under the HIPAA privacy, the HIPAA security, or the HIPAA breach notification rule if an interception or something like that happened to occur.²⁷

So, this is actually a formal notice of enforcement discretion, and I just wanted to compare this to what other agencies are doing.²⁸ This is SAMHSA, which of course, we all know, is a Substance Abuse and Mental Health Services Administration, and here they're not issuing a waiver or a notice of enforcement discretion.²⁹ But all they're saying is that under 42 CFR Part 2, which is our privacy regulations that govern federally-assisted alcohol and drug abuse treatment providers, that they realize that it would be difficult for these providers to obtain their patients', who have substance use disorders, prior written consent when you're doing telehealth via in person care.³⁰ And although normally SAMHSA requires a patient to give their prior written consent before their substance use disorder treatment records can be used and disclosed, there is an existing exception in 42 CFR Part 2, which is the exception relating to a bona fide medical emergency that applies or can apply during the COVID-19 pandemic.³¹

²⁵ U.S. DEPT. OF HEALTH & HUMAN SERVS., *Notification of Enforcement Discretion for Telehealth Remote Communications During the COVID-19 Nationwide Public Health Emergency*, <https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/notification-enforcement-discretion-telehealth/index.html> (last visited Jan. 20, 2021).

²⁶ *Id.*

²⁷ *Id.*

²⁸ SUBSTANCE ABUSE & MENTAL HEALTH SERVS. ADMIN., *COVID-19 Public Health Emergency Response and 42 CFR Part 2 Guidance*, <https://www.samhsa.gov/sites/default/files/covid-19-42-cfr-part-2-guidance-03192020.pdf> (last visited Jan 20, 2021).

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

So, hopefully, I think my time is up but I just wanted to say that I provided you with eight illustrative, but certainly not exhaustive, examples of how telehealth or telemedicine has kind of either been deregulated, or what we might say expanded, during the COVID-19 pandemic. And I hope that one thing we can talk about during the Q&A or maybe that we can hear from our other speakers is the likelihood that these forms of deregulation or expansion will survive the COVID-19 pandemic. And I know we have a health care practitioner on the line and I'm very curious regarding the clinical or the medical appropriateness of maintaining these telehealth and telemedicine forms of deregulation or expansion. But thank you so much!

Paige Goodwin: Thank you, Professor Tovino, for that very informative presentation. We have a couple of minutes left for questions from attendees. So, the first question that we got was, “Do you see the need for telehealth to be reimbursing at in-person rates to ensure access to more patients? If reimbursed at normal telehealth rates, do patients have issues accessing the telehealth that they may need?”

Stacey Tovino: No, that's a very good question. I don't currently work at an insurer, I don't currently, I'm not a clinician. I am just a lawyer and a law professor, and I have a graduate degree in medical humanities so I can't answer that empirically, meaning I don't know how many patients are not getting telehealth services, because maybe their providers don't want to provide telehealth services if there is not payment parity, or are discouraged from providing telehealth services because of payment disparities. That said, there is a robust academic, and I'm very interested to hear from the practitioners later on, but there's a robust academic discussion of whether we should be talking about telemedicine payment parity, which is the same payment for telehealth versus inpatient rates, or maybe, something more like telemedicine or telehealth equality, such that if an in-person visit took 60 minutes, but a telehealth visit took 45 minutes, then the telehealth payment would be up to 75% of the in-person visit. But those are very good questions and I think they're probably better answered by people who treat patients and or patients themselves. But that's a great question.

Paige Goodwin: We have one more question, it says, “I’m interested in how a chiropractor might provide services to a patient via telehealth? I think that must be mostly hands-on.”

Stacey Tovino: That's a great question! So that question comes out of the slide or the set of slides where I said historically, public healthcare programs and private health plans would only allow a limited number, or I should say probably class, of health care providers to provide telehealth and telemedicine, like osteopathic and allopathic physicians, nurse practitioners, and physician assistants. As you saw from that one slide, some payors are pretty much allowing any healthcare practitioner under the sun who can efficiently and effectively and safely provide a service during the COVID-19 pandemic to provide it.³² That is a great question. I don't have a doctoral degree in chiropractic, so I don't know if there are any chiropractic manipulations that can be self-done by a patient, but that's a great question that would probably have to be best answered by a chiropractor. That's a great question though.

But, if we think about the other classes of healthcare practitioners, for example, mental health professionals you can see online, and they can talk to you and they can evaluate your mental state. I've actually seen an ophthalmologist online and they were actually able to look at my eye very closely. My husband has seen a general practitioner and he's been able to cough and have them hear how stuffed up he is, so obviously there are lots of health care providers who can do what they do through telehealth and telemedicine.

Paige Goodwin: Well, that is all the time that we have. Thank you so much again, and I'm going to hand it over to Casey.

Casey you're muted.

Casey Goggin: I started this presentation being so proud of myself for not doing that. Alright, so thank you again Professor Tovino for giving us that very insightful presentation. It was absolutely wonderful. I know I learned a lot.

³² CMS Flexibilities, *supra* note 21.

Our next presenter this afternoon is Dr. David Charles, the Medical Director for Vanderbilt Telehealth. He also serves as a professor of neurology and the Vice Chairman for Education, Director of the Movement Disorders Clinic, and is an attending physician at Vanderbilt University. Dr. Charles's current line of telehealth research addresses treatment of people with cervical dystonia, spasticity, and headache. He has offered over 50 publications and is currently leading a study on the continuous quality of improvement of teleneurology services provided in community-based hospitals. Dr. Charles is a member of the American Neurological Association, a Fellow of the American Academy of Neurology, and Chair of the Alliance for Patient Access. He is also a member of the Alpha Omega Honor Medical Society where he received the Candle Award for his positive impact on medical students.

Dr. Charles graduated cum laude from Vanderbilt University School of Engineering with a BS in Computer Science and Mathematics, and in 1990 he went on to earn his medical degree from Vanderbilt University School of Medicine. Prior to joining Vanderbilt, he served as a health policy fellow in the United States Senate on the staff of the Labor Subcommittee for Public Health and Safety and was a nominee for the United States House of Representatives from Tennessee's Sixth Congressional District.

Dr. David Charles: Whoa!

Casey Goggin: Thank you, Dr. Charles, for coming today and I'll let you just begin your presentation.

Dr. David Charles: Thank you so much for that introduction! My goodness, I did not expect all of that. You're very generous. So, I'll begin sharing my screen, and talking with you about telehealth at Vanderbilt. Dr. Tovino, I really enjoyed your presentation. Bear with me one moment. So just want to make sure that everyone can see my screen and hear me okay?

Paige Goodwin: We can see your screen.

Dr. David Charles: Thank you. Very good. Again, I'm David Charles, I serve as Vice Chair of Neurology at Vanderbilt University and Medical Director of Telehealth at Vanderbilt. I want to give you the clinician's perspective on telehealth and maybe just a little bit of a historical perspective as well.

So, most people when they think of telemedicine or telehealth they think of two-way, real time audiovisual connection with the clinician and a patient. This actually began in the 1950s, and I would assert that really the entity that uses telehealth the best and the most is actually the federal government. The Veterans Affairs Administration conducted over 2 million visits for nearly one million veterans last year³³, and the US Army has been using telehealth for years and years. Last year it conducted over 60,000 visits worldwide across 22 different time zones. So, telehealth is not new, but its adoption sort of in mainstream healthcare for non-federal uses has really taken off during the time of COVID.

Before COVID, the barriers to adoption were pretty clear. Commercial insurance companies as well as CMS, so for Medicare and Medicaid, they had very strict limits on the payment of services for telehealth and they were very slow over the past two decades to adopt telehealth because they were basically concerned that there would be this rampant overuse of healthcare services. A second barrier, state medical licensure. So, the idea that states regulate telehealth and clinicians that can provide telehealth across state lines - it really kind of parallels the Thomas Jefferson quote that laws and institutions must keep pace with the progress of the human mind. Here, we have really archaic state medical licensure regulations that have not kept pace with the development of technology and the ability to provide care really anywhere in the world, much less, you know, across state lines.

Lastly, geographic restrictions that Dr. Tovino mentioned. You know, historically, I couldn't see a patient via telehealth in their home or at a private place where they work. Payors would restrict coverage to what they called qualified sites of service, so that might

³³ U.S. DEPT. OF VETERAN AFFAIRS, *VA reports significant increase in Veteran use of telehealth services* (Nov. 22, 2019), <https://www.va.gov/opa/pressrel/includes/viewPDF.cfm?id=5365>.

be a physician office, a rural health clinic, a hospital outpatient clinic, and so forth. But of the main barriers to adoption in the United States, even though I've listed three here, by far and away commercial insurance companies and the Center for Medicare and Medicaid Services were the overwhelming barrier to Americans having access to telehealth.

So, what about teleneurology at Vanderbilt University Medical Center? So, just to give you by way of background, we provide teleneurology services to eleven community hospitals and what I mean by this is that neurologists at Vanderbilt, using technology, are participating in the care of patients who present to community hospital emergency departments or who are admitted to community hospitals. We do this over FaceTime on iPads. We have an image application that allows us to share, say, an MRI scan of the brain or a CT scan of the brain back and forth. And we started this program in 2014, and the reason we started it is because there is a national shortage of neurologists. There are many communities throughout our nation that have no neurologist on staff at their hospitals.

And so, there's a huge need to project specialty services into community settings, being able to provide urgent care to patients, say for instance, when they present with something like a stroke or a seizure. So, since 2014, we've conducted well over 8000 consultations using iPads and FaceTime. It's fully HIPAA³⁴ compliant when connected over an encrypted Wi-Fi connection, and here's the take-home message: 88% of the patients are managed at the community hospital. In other words, they can stay closest to their family, closest to their home. Only 12% of the consults, patients seen via consult, require transfer to a higher level of care. So here, this really means that the patient's getting the right care at the right place. Before we had this service, we often saw patients with very minor neurologic conditions being transferred to Vanderbilt and other tertiary centers just because there was no neurologist available in the community setting. So, I would say, that without a doubt, this program, which really launched telehealth at Vanderbilt has been the single largest driver of appropriate health care provided in the appropriate setting, in fact, at the least cost setting. So, while we

³⁴ HIPAA Privacy Rule, 45 C.F.R. §§160, 164 (2013).

faced all of these barriers from insurance companies, in this case, the hospitals saw the value, so they purchased the service from Vanderbilt. And the insurance companies all through over these last six years have refused to pay for any of these 8,000 consults. It's really been a stark way to illuminate how misguided commercial insurance has been toward telehealth for really the past almost two decades.

So, fast forward to the COVID pandemic, so I will not go through this slide because Dr. Tovino did an outstanding job talking about what the administration has done at the federal level to facilitate the adoption of telehealth during the pandemic. So how did Vanderbilt respond to this? So, within about eight days in early and mid-March we trained over 3,000 physicians and staff in the use of telehealth. Because the federal government, in essence, opened it up, meaning I could see a patient directly in their home over their own device. I could see them at their place of work if they stepped into a private office. I could see the patient wherever the patient wanted to be seen. So, we trained over 3,000 physicians and staff to be ready to provide healthcare via telehealth. We produced educational materials to train those physicians, but also the support staff, to set up these visits and get things ready. And then finally, when our medical students were sent home during COVID, they stepped up, volunteered, organized themselves, and trained over 5,000 patients to get ready for telehealth. Meaning that they tested their equipment and talked them through how to allow their device to use their camera or their microphone and such.

And so that was sort of the beginning of the experience. We immediately launched a quality improvement initiative within the department of neurology, and we ran this from March 18 through May 10.³⁵ It's IRB approved.³⁶ And what it included was post-visit surveys of our patients. We evaluated the average travel time and

³⁵ Kelly Harper *et al.*, *Vanderbilt University Medical Center Ambulatory Teleneurology COVID-19 Experience*, Online Ahead of Print, *TELEMEDICINE & E-HEALTH*, <https://doi.org/10.1089/tmj.2020.0382> (last visited January 30, 2021).

³⁶ See generally U.S. FOOD & DRUG ADMIN., *Institutional Review Boards (IRBs) and Protection of Human Subjects in Clinical Trials*, <https://www.fda.gov/about-fda/center-drug-evaluation-and-research-cder/institutional-review-boards-irbs-and-protection-human-subjects-clinical-trials> (last visited January 30, 2021).

distance saved. And then we also surveyed the neurologists that were providing healthcare as well. So, from March 18th to May 10, just in the Department of Neurology, so one single department, not medicine, not pediatrics, not surgery, just in neurology, we conducted nearly 4,000 tele-neurology visits. We surveyed all of those patients and got a 40% response rate.³⁷ And I don't know if you've done much survey work, but a 40% response rate would be considered excellent. Here's what we found, and I won't read all of these to you, but in short, patients love telehealth.

While you're looking at these responses to the survey, I can share with you a story. So, I conducted a telehealth visit. The gentleman lived east of Knoxville, told us on the call that it was about a four hour drive each way for him to come to Vanderbilt for care. He's in his late 70s. He had a liver transplant many years ago at Vanderbilt and as a consequence of the illness that required him to have a liver transplant, he had a condition called a peripheral neuropathy, meaning that he had very uncomfortable and painful sensations in his feet and to a lesser degree in his hands. And so, our care in the neurology department was helping manage those symptoms, which were a consequence of the illness that led to his liver transplant. It was a one year follow up, we had seen the prior year and it was just to check in with him, make sure that he was tolerating the medicine we had given him okay, and he was still getting some relief from his symptoms.

The visit lasted less than 20 minutes. And in speaking with him at the end of the visit, I asked him, just curious you know, "how do you like, you know, this telehealth visit, and is this your first telehealth visit?" In fact, it was his second telehealth visit. And he said to me, "Dr. Charles, I'm never coming back unless I have to be seen in person for a procedure." He said, "this visit via telehealth just saved an entire day of my life. I would have spent 4 hours driving to Vanderbilt, parking, getting in for the visit, 4 hours returning, and here we completed the visit what? In less than 20 minutes." And so that's just an illustration of one patient's example and how you can imagine he's so highly satisfied. But it goes further than that.

³⁷ Harper, *supra* note 35, at 2.

It goes further than that because if you're an employer, let's say that you're Nissan or Bridgestone or the state of Tennessee, the largest employer in our state, or the largest private employer, FedEx, employers now see the benefit of telehealth. Right? A person can be seen at work, someone with a chronic condition, let's say they have MS or diabetes, and they may need to be seen almost monthly for health care visits. Some of those visits can be done via telehealth. If the person can just step into a private place at work, they could in twenty minutes, compete what would have made them miss a half day or even a day of work, depending on where they lived. So now employers get it. So, the game is over for commercial insurance throwing up barriers to telehealth. Hundreds of thousands, if not millions, of Americans now have experienced telehealth. And employers who pay for employer sponsored health insurance get it. Right? They're not going to allow their own health plans, which they for, to prohibit their employees from having access to telehealth because it just drives up their absenteeism at their own company.

So, I think that is the single most important takeaway from what's happened in this telehealth experience. Patients saved in our study about two hours of driving on average across this.³⁸ We also took the step of what about new versus return visits. So, I had clinicians come up to me telling me they loved telehealth and of course it's not right for all care. Some care has to be done in person. But for those visits where telehealth is appropriate, I was hearing from other physicians that the new patient visit is not as good as the return visit. So, a return visit, the patient and the physician already have an established relationship. They know one another. And it's a check in visit for an ongoing health concern. The new patient, however, has never met the clinician. And the physician-patient relationship really is the cornerstone of health care. And how does a physician and a patient establish that relationship? Well, it actually happens in the first moments that the physician walks in the room. You close the door and you're alone with the patient, in those very first minutes, the patient is already formulating their impressions of the physician. Is the physician someone they think they can trust? Does the physician know what he or she is doing? Well, they keep the things that they hear private.

³⁸ Harper, *supra* note 35, at 2.

Those are the elements of the patient-physician relationship, and trust, it forms that way. And I have physicians repeatedly tell me that it's difficult over telehealth to form that relationship. And our survey told us the same thing. What you'll see here, and I won't read all of these to you, but returning patients, in other words people being seen via telehealth who had an established healthcare provider, felt that it was probably better.³⁹ Right, they had greater comfort. They were more satisfied with health care provided via telehealth than the new. Now, don't take away from this that new patients weren't satisfied. I mean the level of satisfaction was remarkably high. It's just that it's a little bit higher in return visits. Alright, next step we surveyed our physicians. 139 faculty, fellows, and residents who had provided tele-neurology care were surveyed on May 10, kind of the conclusion of our most intense slowdown at the medical center. We had a 79% response rate.⁴⁰ And if you have any experience surveying physicians, getting a 10% response rate is sometimes considered good. So, this was an absolutely phenomenal response rate here and here is what we found. Again, I won't read them to you, but our clinicians were very pleased with the option to offer telehealth.⁴¹

So next, the neurologists gave us some comments. I'll just let you read some of these. But, from the patient, you know we had 1,500 patients, individual patients respond to the survey. Their free text comments in the box were just amazing.⁴² It was so much fun to read them. I mean, here we are in the middle of a pandemic and we have patients who are just so absolutely thrilled that they were able to continue their health care, they had never thought about telehealth, their insurance company had never even dreamed of letting them use it and just to have such a great experience. And then finally, a few more patient comments listed here. And I'll conclude for questions. Overall, as I already stated earlier in the talk, patient and physician satisfaction is very high. Patients and caregivers, the clinicians have a greater awareness of how telehealth works. And so, as I said earlier, we're never going back. It's just not going to happen. One way or the other, either through legislative process at the federal level or commercial insurance driven by employers,

³⁹ Harper, *supra* note 35, at 2.

⁴⁰ Harper, *supra* note 35, at 4.

⁴¹ *Id.*

⁴² See Harper, *supra* note 35, at 4.

telehealth is here to stay for sure. I like this quote. One of the students on our team chose it. “Close scrutiny will show that most ‘crisis situations’ are opportunities to either advance or stay where you are.” And I think we’ve certainly advanced in telehealth. So, with that, I’ll take questions.

Casey Goggin: Unfortunately, I think we’re a little bit running short on time. So, we will, if we have extra time here at the end, we will pick up and run it back to you. But we’re going to shift gears a little bit.