American College of
Emergency Physicians
Section on Telehealth

Spring Newsletter 2024

CONTENTS

HEALTH POLICY CORNER

Telehealth Regulatory Updates

By Ryan McBride | Congressional Affairs Director at ACEP

Federal Telehealth Policy Updates: Still and Uncertain Future

As far as new, concrete federal telehealth policies or changes go, there is not much new to report since our last update in the Winter 2023 newsletter. However, there has been some recent activity in Congress with several committees taking a look at more than a dozen different legislative proposals across the telehealth spectrum, and there are at least some limited regulatory items on the horizon as well. But beyond that, all eyes are on Congress to see what happens, likely at the end of the year. regarding the extension of telehealth flexibilities that came out of the COVID-19 public health emergency (PHE).

On the regulatory front, one big ticket item on our radar is that of the upcoming Physician Fee Schedule (PFS) rule anticipated later this year. The Centers for Medicare & Medicaid Services (CMS) will need to determine payment rates for the new Evaluation and Management (E/M) telehealth codes, developed by the American Medical Association's (AMA) Relative Value Scale Update Committee (RUC) and Current Procedural Terminology (CPT) panel, and then decide whether to keep certain codes (including the emergency department (ED) E/M codes) on the provisional list of Medicare telehealth services past calendar year (CY) 2024.

For some additional background on this, I am going to quote my friend, regulatory enthusiast, and ACEP alum, Jeffrey Davis of "Regs & Eggs" fame:

> *While most office-based codes are already permanently on the list of approved telehealth services, CMS receives evidence from the public each year to decide which other types of codes (not similar to an office visit) it should permanently add to the list. CMS's decisions are based on an evaluation of peer-reviewed data that must prove that the service, when provided via telehealth, improves quality and reduces costs. This is an extremely high bar, and CMS rarely adds new types of services permanently to the list.*

Switching gears to break down the legislative side a little further, on March 12, the House of Representatives Committee on Ways and Means held a hearing, entitled, "Enhancing Access to Care at Home in Rural and Underserved Communities." During the hearing, there was bipartisan agreement on the value of telehealth technologies, remote patient monitoring, home dialysis, and hospital-at-home services to help improve access to care, with additional focus on concerns that access to these services remain limited in rural and underserved areas. There were also some concerns from members about ensuring that there are appropriate guardrails to prevent waste, fraud, and abuse (a frequent refrain you will hear from Congress).

On April 10, the House Committee on Energy and Commerce Subcommittee on Health held a hearing, entitled, "Legislative Proposals to Support Patient Access to Telehealth Services." The hearing examined 15 different bills to make various COVID-19 PHE-related telehealth flexibilities permanent and expand access to telehealth services, including the cornerstone policies related to waiving originating site and geographic restrictions. ACEP submitted a brief letter for the record for the hearing to reinforce our support for expanded telehealth flexibilities, in particular the bipartisan CONNECT for Health Act that ACEP has helped develop and inform for several years now. This legislation would:

- Permanently remove all geographic restrictions on telehealth services and expand originating sites to include the home and other sites;
- Permanently allow health centers and rural health clinics to provide telehealth services;
- Allow more eligible health care professionals to utilize telehealth services;
- Remove unnecessary in-person visit requirement for telemental health services;
- Allow for the waiver of telehealth restrictions during public health emergencies; and
- Require more published data to learn more about how telehealth is being used, impacts of quality of care, and how it can be improved to support patients and health care providers.

Other bills considered during the hearing covered other aspects, such as permitting Federally Qualified Health Centers (FQHCs) and Rural Health Clinics (RHCs) to qualify as distant site providers for non-behavioral and mental health services, use of audio-only telehealth platforms, removing the in-person visit requirement within six months of an initial behavioral or mental health service, and others.

On the positive side, the takeaway from all of these hearings is that there remains general bipartisan agreement that telehealth is here to stay, that it has improved access to care for Americans, and that the COVID-19 PHE flexibilities should be extended. Good news.

However, there are also some headwinds that telehealth stakeholders need to be prepared to address. As we have discussed before, among these are concerns about a lack of data that can justify making telehealth services permanent (rather than just a series of temporary extensions); questions about whether telehealth services increase costs or utilization, especially given some recent studies showing at least modest increases in spending; ensuring that patients are able to choose whether in-person or virtual care is right for them; as well as ensuring that telehealth services are not used to undermine or shirk network adequacy standards. Of course, there's always that ever-present "waste, fraud, and abuse" issue as noted earlier, with legislators on both sides raising concerns about the potential for the health care industry to game the system and use telehealth to generate profit. Overall, it appears that even though there is more data available today, that does not seem to have satisfied legislators' concerns as of yet.

Another challenge is that some systems and payers have either limited or wound down their telehealth business, with some high-profile cases like UnitedHealth Group shuttering its Optum Virtual Care service. There is a legitimate worry that Congress may look at these examples and take the wrong lessons from them, i.e., "if the private sector is not finding telehealth useful, then why should the federal government prop it up?" – and not recognizing that Congress' own inaction may be a significant driver of this behavior, as the private sector would not want to

continue pouring resources into telehealth programs if there is uncertainty about continued federal support and no guarantee of Medicare coverage as a baseline.

If this all sounds familiar, that's because not much has really changed since my last update on the lay of the land. I think that what is clear is that extending these flexibilities is not going to be easy or be done in an ideal way (e.g., making telehealth permanent). I will qualify this by saying I have less and less confidence in *any* predictions about what Congress may or may not do these days, but as I've said before, all signs continue to point to a short-term extension of telehealth flexibilities, either one or two years. Like most issues in Congress, most of the problem just comes down to the cost of making telehealth permanent – as House Energy and Commerce Health Subcommittee Chairman Brett Guthrie (R-KY) noted in the hearing, "making these authorities permanent is likely to cost much more than a short-term extension, and we want to make sure that whatever we move out of committee is paid for."

We will keep you posted if there is any movement or the dynamics change prior to the end of the year, but just remember that few things motivate Congress like a deadline!

SPOTLIGHT Section

Spotlight: Building for Success in Telehealth

By Aditi U. Joshi MD, MSc, FACEP | Author: Telehealth Success: How to Thrive in the New Age of Remote Care. Councilor, ACEP Telehealth Section.

Emergency Medicine has a long and varied history of using telehealth, from accessing specialty care, delivering services, triage and virtual observation. Uniquely bridging the community through the inpatient space, our specialty is full of innovators and innovations striving for better acute unscheduled care.

The ACEP Telehealth Section is no exception as it has been instrumental in advocacy, defining tele-emergency care, and guiding what telehealth touchpoints there are within our specialty. I've been a part of the telehealth space for 11 years and with that experience, I recently co-authored and published a book on how to be successful in telehealth. What is necessary so that one doesn't recreate past mistakes? How do we ensure that we keep the best parts of our current practice while taking advantage of technologies shaping and changing our lives?

I was asked to share a (very) abridged version of these five broad areas that are necessary while thinking through adding any innovations to our practices.

1. Patients: Telehealth initiatives strive to improve patient access to timely care, including specialist access and intervention in critical scenarios. Researching the community you're serving, getting input from current patients and being clear on program goals helps keep the patient at the center. EM is a high risk and chaotic environment, however, we have ample evidence and protocols that can be applied to digital health programs. With that we can ensure patients can receive prompt triage, assessment, and care regardless of geographic barriers.

2. Clinicians: The other end-users are physicians and clinicians. Starting and expanding a program will be virtually impossible if they don't want to do it. In general, EM is open to innovation as evidenced by the number of leaders and programs within the digital health space. Regardless, getting better buy-in can be aided with targeted education on how it can improve patient care, how it improves efficiencies, gives access to data and enables decision making and collaborative care. CME programs and medical education can target and improve skills. Organizations need leadership that understands clinical workflows as well, otherwise tech tools will only worsen the already overburdened and burning out EM workforce.

3. Financial: The telehealth reimbursement flexibilities during the pandemic allowed for expanded programs, however, some of these are retiring and will require advocacy and use of codes to demonstrate their efficacy (something that the ACEP section advocates for EM telehealth). Financial consideration also requires considering the cost of investment. Cost-saving

studies are generally difficult, however there are studies demonstrating less hospital readmissions, decreased morbidity, and better care collaboration which can decrease costs. However, those financial incentives are not necessarily relevant in EM departmental budgets. There are other incentives such as provider-to-provider telehealth which can decrease transfers (allowing for spoke EDs to keep their patients and billing) and virtual observation. Financial viability and sustainability of telehealth programs requires balancing these benefits with the costs of investment – some of which we finally have better data on.

4. Technology: Telehealth is less about the technology than it is deciding the clinical protocols and financial incentives. But it is noticeable when you pick the wrong one (and your clinicians will certainly tell you). Nowadays, there are numerous options that can serve whatever program needs that are required, whether that is advanced functionalities or a simple video connection. Innovation continues in this space with AI, VR, and devices to improve accuracy and efficacy – something especially necessary in EM or other critical care specialties. In general, I recommend ensuring you understand the tech required for the clinical scenario and demo more than one option. Practice using it from all users' standpoint (patient, clinician etc.). Also when buying from a tech company, remember we do not always use words in the exact same manner – integration can mean either data or workflow with very different costs and expertise.

5. Compliance: Licensing regulations, ensuring security and privacy, malpractice and promoting quality assurance all fall under compliance. These are mostly straightforward but regulations have often changed within this space. This requires staying up to date on changes to federal and state laws. Malpractice cases have been rare and mostly unrelated to clinical care although insurance is still recommended. There have been more fraud cases than malpractice. Most of these could have been avoided by understanding regulations and being vigilant.

The five broad pillars have many details and nuance within them, however, it is a convenient way to organize all aspects of building successful programs. Emergency medicine has the unique position of straddling community to inpatient care and can use telehealth at a number of touch points. That makes it especially crucial to understand the newest frontiers in innovative care so we can lead the transformation of healthcare delivery while ensuring safety of the workforce.

VOICES FROM THE FIELD

The Dartmouth Health Connected Care Experience

By Kevin Curtis, MD MS FACEP | Medical Director at Dartmouth Health Connected Care

Dartmouth Health (DH) is located in New Hampshire and Vermont, a largely rural region with one academic medical center (AMC) in each of the three Northern New England (NNE) states (NH, VT, and ME). Although truly outstanding care occurs at many of the smaller hospitals in NNE, the AMCs tend to have a disproportionate number of specialists with significant shortages elsewhere. As a result, it can be long distances to specialty care, and even then, that assumes that people have a pathway to referral, have available transportation, can miss a day or half-day of work, can get child care, and that the weather permits long distance travel. In addition, capacity and bed availability at referral hospitals is a substantial ongoing challenge.

In response to that landscape and need, Dartmouth Health Connected Care was formed in 2012, well before the pandemic, with a mission of using telehealth to help deliver outstanding care to the region independent of patient location. A strong focus is on rural care and a secondary goal is to keep care local whenever possible. Toward that end, Connected Care currently has seven mature 24/7 acute care telehealth service lines and operates in >35 hospitals, the majority of which are not in the Dartmouth Health system. Those acute telehealth service include TeleICU, TeleNeurology/Stroke, TelePsychiatry, TeleICN (neonatal), TeleEmergency, and TelePharmacy. Within those services, they conduct >11,000 video encounters and execute ~1 million orders per year. In addition, in terms of scheduled outpatient telehealth visits, Dartmouth Health performs >80,000 telehealth appointments in the region annually. Connected Care is also the home of the Central Monitoring Hub where specially trained technicians oversee cardiac monitoring 24/7 for 193 beds in the AMC. The TeleEmergency service consists of live interactive audiovisual technology that is hard-wired into 13 EDs in NNE and allows immediate support, collaboration, care, and transfer/transport assistance from a dedicated 3-table Hub staffed by an ED physician and ED RN.

The Connected Care TeleNeurology/Stroke service provides access to a board certified neurologist 24/7, operates in 16 hospitals, averages >450 urgent/emergent consults per month, and has performed >15,000 encounters since the inception of the program. Despite the fact that many of the participating hospitals are critical access, the transfer rate after an DH TeleNeuro/Stroke video encounter in the ED is <10% and >50% of patients for whom the consult request is for "stroke" or the like receive an alternative diagnosis after the video encounter.

The Dartmouth Health TeleICU program operates from a Hub at Dartmouth's AMC which is staffed 24/7 by an Intensivist and ICU nurse, and which includes proactive, reactive, and surveillance components, the latter of which can provide early detection of patient deterioration. 96 beds in the region are hard-wired with TeleICU including all of the adult ICU beds in the AMC and 35 additional beds among four regional hospitals. Wired community hospitals have seen a doubling of their local ICU volumes, an ability to care for higher acuity patients locally, and a decreased length of stay.

The DH TeleICN program brings a neonatologist to the bedside of 12 hospitals in NNE. Particularly in the face of closures of many L&D units and birthing pavilions in the region, the need for assistance with precipitous and complicated deliveries grows. Hospitals with TeleICN are seeing a 50% retention rate for the babies involved. This is in contrast to the pre-TeleICN situation in which the majority of newborns were transferred to the AMC after a ICN phone consult, many for just an overnight observation period many miles from home.

TelePharmacy operates in 30 hospitals in 5 states and has executed over 4,000,000 orders since the start of the program. Responding to orders in <10 minutes, TelePharmacy allows hospitals to address regional pharmacist shortages and/or sudden gaps in coverage while typically seeing a 20-80% reduction in costs vs. onsite coverage. In addition, the program has demonstrated the avoidance of >800 potential medication errors per quarter.

Connected Care emergency TelePsychiatry provides a board-certified psychiatrist to people presenting primarily to the ED, but also as inpatients, with mental health crises. Operating 24/7 with 13 hospitals in the region, the service helps with the profound shortage of mental health resources in the region. One of the participating hospitals observed a 66% reduction in length of stay with the service for pediatric patients boarding in their ED.

Not only do these Connected Care services provide more equitable access to healthcare for people in rural areas, they have proven to be highly beneficial in terms of meaningful health outcomes, rural hospital costs, bedside clinician satisfaction, and patient satisfaction.

Bridging EMS and an Uber-Style EM Virtual Health Model

By Dany Accilien, MD MBA | Chief Medical Officer at RelyMD

Our ER staffing company has embarked on a journey to build upon the solid foundation laid by the Emergency Triage, Treat, and Transport (ET3) model. While ET3 set a paradigm shift in how we approach EMS patients, our virtual health program aims to leverage the flexibility allowed beyond some of ET3's inherent restrictions.

Developed, owned, staffed and managed by ER physicians, our virtual health platform predominantly focuses on virtual consults for employer groups. As with many other virtual health platforms we aim to reduce low-acuity, unscheduled visits to emergency rooms.

To scale this vision, we partnered with a leading, nationwide private EMS organization. This strategic collaboration has propelled our program to active status across 10 states, predominantly in the southeast. In collaboration with our EMS partner, we are utilizing their nursing triage protocols to assess low-acuity, unscheduled 911 calls that may be appropriate for telehealth consultations. This process efficiently connects patients with a network of multi-state licensed, independent board-certified emergency physicians. Our operational model, inspired by the flexibility of the gig economy, allows Emergency physicians to choose their availability, resembling an Uber-style model. Alongside a reimbursement model that is on a per-consult basis, we are able to provide care in a fashion that is economically sustainable.

The program extends beyond traditional care pathways. After a telehealth visit, our ED physicians can instantly coordinate with the nursing team to determine the most appropriate next steps for patient care. Leveraging partnerships, the system facilitates innovative care dispositions, including no-cost rideshare services to emergency departments and urgent cares or scheduling primary care appointments through Federally Qualified Health Centers (FQHCs) at no cost to the patient.

Although a relatively new program, our platform has facilitated nearly 3,000 EMS patient visits to date over the past year. As we actively collect and analyze our outcomes data, we hope our unique approach stands as a beacon of economic and resource efficiency for similar services, aiming to save thousands of dollars across the healthcare ecosystem for patients, payors, hospital systems and precious EMS personnel resources.

AWESOME ABSTRACTS

"In God we trust. All others must bring data." – W. Edwards Deming
If there are abstracts you have found to be great, please send them to the Newsletter Editor for consideration for the next issue!

Telehealth Use and Health Equity for Mental Health and Substance Use Disorder During the COVID-19 Pandemic: A Systematic Review

J. P. Vakkalanka, K. Gadag, L. Lavin, S. Ternes, H. S. Healy, K. A. S. Merchant, et al.

Background: As a result of the COVID-19 public health emergency (PHE), telehealth utilization accelerated to facilitate health care management and minimize risk. However, those with mental health conditions and substance use disorders (SUD)-who represent a vulnerable population, and members of underrepresented minorities (e.g., rural, racial/ethnic minorities, the elderly)-may not benefit from telehealth equally. Objective: To evaluate health equality in clinical effectiveness and utilization measures associated with telehealth for clinical management of mental health disorders and SUD to identify emerging patterns for underrepresented groups stratified by race/ethnicity, gender, age, rural status, insurance, sexual minorities, and social vulnerability. Methods: We performed a systematic review in PubMed, Embase, Cochrane Central Register of Controlled Trials, and CINAHL through November 2022. Studies included those with telehealth, COVID-19, health equity, and mental health or SUD treatment/care concepts. Our outcomes included general clinical measures, mental health or SUD clinical measures, and operational measures. Results: Of the 2,740 studies screened, 25 met eligibility criteria. The majority of studies (n = 20) evaluated telehealth for mental health conditions, while the remaining five studies evaluated telehealth for opioid use

disorder/dependence. The most common study outcomes were utilization measures (n = 19) or demographic predictors of telehealth utilization (n = 3). Groups that consistently demonstrated less telehealth utilization during the PHE included rural residents, older populations, and Black/African American minorities. Conclusions: We observed evidence of inequities in telehealth utilization among several underrepresented groups. Future efforts should focus on measuring the contribution of utilization disparities on outcomes and strategies to mitigate disparities in implementation.

The association between rurality, dual Medicare/Medicaid eligibility and chronic conditions with telehealth utilization: An analysis of 2019-2020 national Medicare claims

C. A. Bogulski, G. Pro, M. Acharya, M. M. Ali, C. C. Brown, C. J. Hayes, et al.

INTRODUCTION: Telehealth services have the potential to increase healthcare access among underserved populations, such as rural residents and racial/ethnic minority groups. The COVID-19 public health emergency led to unprecedented growth in telehealth utilization, but evidence suggests the growth has not been equitable across all patient populations. This study aimed to explore whether telehealth utilization and expansion changed equitably from 2019 to 2020 among sub-groups of Medicare beneficiaries. METHODS: We conducted an analysis of telehealth utilization among a 20% random sample of 2019-2020 Medicare beneficiaries on a national level. We fit multivariable logistic regression models and calculated average marginal effects (AME) to assess the association between demographic and clinical characteristics on telehealth utilization. RESULTS: We found telehealth utilization was less likely among non-Hispanic Black/African-American (2019: adjusted odds ratio [aOR] = 0.77, AME = -0.15; 2020: aOR = 0.85, AME = -3.50) and Hispanic (2019: aOR = 0.79, AME = -0.13; 2020: aOR = 0.87,

AME = -2.89) beneficiaries, relative to non-Hispanic White beneficiaries in both 2019 and 2020, with larger disparities in 2020. Rural beneficiaries were more likely to utilize telehealth than urban beneficiaries in 2019 (aOR = 2.62, AME = 0.84), but less likely in 2020 (aOR = 0.57, AME = -14.47). In both years, dually eligible Medicare/Medicaid beneficiaries were more likely than non-dually eligible beneficiaries to utilize telehealth (2019: aOR = 4.75, AME = 0.84; 2020: aOR = 1.34, AME = 2.25). However, the effects of dual eligibility and rurality changed in both models as the number of chronic conditions increased. DISCUSSION: We found evidence of increasing disparities in telehealth utilization among several Medicare beneficiary sub-groups in 2020 relative to 2019, including individuals of minority race/ethnicity, rural residents, and dually eligible beneficiaries, with disparities increasing among individuals with more chronic conditions. Although telehealth has the potential to address health inequities, our findings suggest that many of the patients in greatest need of healthcare are least likely to utilize telehealth services.

Informed consent for artificial intelligence in emergency medicine: A practical guide

K. V. Iserson

As artificial intelligence (AI) expands its presence in healthcare, particularly within emergency medicine (EM), there is growing urgency to explore the ethical and practical considerations surrounding its adoption. AI holds the potential to revolutionize how emergency physicians (EPs) make clinical decisions, but AI's complexity often surpasses EPs' capacity to provide patients with informed consent regarding its use. This article underscores the crucial need to address the ethical pitfalls of AI in EM. Patient autonomy necessitates that EPs engage in conversations with patients about whether to use AI in their evaluation and treatment. As clinical AI integration expands, this discussion should become an integral part of the informed consent process, aligning with ethical and legal requirements. The rapid availability of AI programs, fueled by vast electronic health record (EHR) datasets, has led to increased pressure on hospitals and

clinicians to embrace clinical AI without comprehensive system evaluation. However, the evolving landscape of AI technology outpaces our ability to anticipate its impact on medical practice and patient care. The central question arises: Are EPs equipped with the necessary knowledge to offer well-informed consent regarding clinical AI? Collaborative efforts between EPs, bioethicists, AI researchers, and healthcare administrators are essential for the development and implementation of optimal AI practices in EM. To facilitate informed consent about AI, EPs should understand at least seven key areas: (1) how AI systems operate; (2) whether AI systems are understandable and trustworthy; (3) the limitations of and errors AI systems make; (4) how disagreements between the EP and AI are resolved; (5) whether the patient's personally identifiable information (PII) and the AI computer systems will be secure; (6) if the AI system functions reliably (has been validated); and (7) if the AI program exhibits bias. This article addresses each of these critical issues, aiming to empower EPs with the knowledge required to navigate the intersection of AI and informed consent in EM.

Ai-Enabled Assessment of Cardiac Function and Video Quality in Emergency Department Point-of-Care Echocardiograms

B. He, D. Dash, Y. Duanmu, T. X. Tan, D. Ouyang and J. Zou

BACKGROUND: The adoption of point-of-care ultrasound (POCUS) has greatly improved the ability to rapidly evaluate unstable emergency department (ED) patients at the bedside. One major use of POCUS is to obtain echocardiograms to assess cardiac function. OBJECTIVES: We developed EchoNet-POCUS, a novel deep learning system, to aid emergency physicians (EPs) in interpreting POCUS echocardiograms and to reduce operator-to-operator variability. METHODS: We collected a new dataset of POCUS echocardiogram videos obtained in the ED by EPs and annotated the cardiac function and quality of each video. Using this dataset, we train EchoNet-POCUS to evaluate both cardiac function and video quality in POCUS echocardiograms. RESULTS: EchoNet-POCUS achieves an area under the receiver operating characteristic curve (AUROC) of 0.92 (0.89-0.94) for predicting whether cardiac function is abnormal and an AUROC of

0.81 (0.78-0.85) for predicting video quality. CONCLUSIONS: EchoNet-POCUS can be applied to bedside echocardiogram videos in real time using commodity hardware, as we demonstrate in a prospective pilot study.