March 22, 2023

Improving Care Delivery and Innovation

NAM Action Collaborative on Countering the U.S. Opioid Epidemic
Telehealth and Virtual Care Meeting Series

BACKGROUND

Throughout the course of the COVID-19 public health emergency (PHE), telehealth and virtual care have emerged as potentially paradigm-shifting tools for both pain management and substance use disorder (SUD), impacting patient access, care delivery, and quality of care for the millions of Americans affected by these related, but disparate, health conditions. Yet, several challenges remain to fully integrate these services into the continuum of care for patients suffering with chronic pain and/or substance misuse. These include: policy, regulations, payment and reimbursement, health professional education and training, technology, digital literacy, and equity considerations.

To better understand these challenges and identify potential solutions, the Pain Management Guidelines and Evidence Standards (PM) and Prevention, Treatment, and Recovery Services (PTR) Working Groups of the National Academy of Medicine’s Action Collaborative on Countering the U.S. Opioid Epidemic (NAM, n.d.a)—a public-private partnership working to advance multisector, interprofessional solutions to reduce opioid misuse and improve outcomes for individuals, families, and communities affected by the opioid crisis—convened a four-part meeting series on telehealth and virtual care in the context of pain management and opioid use disorder (OUD), with the aim that learnings from the series can be applied to other related SUDs, as appropriate (NAM, n.d.b). The meeting series was planned by Action Collaborative members from both the PM and PTR Working Groups, including: Helen Burstin, Council of Medical Specialty Societies (Co-Lead); Kelly J. Clark, Addiction Crisis Solutions (Co-Lead); Rhonda Robinson Beale, UnitedHealth Group; Elizabeth D. Bentley, Kaiser Permanente Northwest; Anna Legreid Dopp, American Society of Health System Pharmacists; Lewis Levy, Teladoc Health; Shari Ling, Centers for Medicare and Medicaid Services; Friedhelm Sandbrink, U.S. Department of Veterans Affairs; and Sarah Wattenberg, National Association for Behavioral Healthcare. Two Discussion Proceedings summarizing the first and second meetings in the series are now available (Duff et al., 2022a; Duff et al., 2023b).

The third meeting in the “Improving Telehealth and Virtual Care for Pain Management and Substance Use Disorders” meeting series—and the subject of this Discussion Proceedings—focused on improving care delivery and innovation (meeting agenda available here: https://nam.edu/wp-content/uploads/2022/05/1.-Meeting-3-Agenda.pdf). This meeting was held virtually on April 25, 2022, and brought together more than 50 participants, including representatives of health professional groups, industry, federal agencies, advocacy groups, health plan providers, and health systems. The primary objectives of the third meeting were to: (1) consider how the delivery of pain management and SUD care can be reimagined in a future hybrid environment—integrating both in-person and virtual care modalities—to better meet the needs of patients, clients, caregivers, and clinicians across care settings; (2) examine the applications for various virtual modalities, discussing both limitations and advantages for each relative to the delivery of pain management and SUD care; and (3) discuss opportunities for telehealth and virtual care to enable and facilitate comprehensive multidisciplinary, team-based care for both pain management and SUD care.

The third meeting was composed of four sessions. The first session outlined various virtual modalities that can be used to aid and facilitate the delivery of hybrid pain management and SUD care and explored the potential barriers and solutions that exist to their broader use and uptake. The second session discussed the potential applications for telehealth and virtual care services and modalities to support integrated, hybrid team-based care models. The third session examined how hybrid and telehealth-enabled pain and SUD care may differ across different care settings, including emergency department, primary care, pharmacy, and opioid treatment programs (OTPs). The final session considered how payers, purchasers, providers, and patients and their families can use telehealth and virtual care services to recreate new systems of care delivery to better address the challenges of pain and SUD care.
MEETING SUMMARY

Integrating Bricks and Clicks: Redesigning Care Pathways with Virtual Modalities

The first session brought together Lewis Levy, chief medical officer of public policy and strategic partnerships at Teladoc Health; Leonardo Angelone, deputy director of the Office of Translational Initiatives and Program Innovations (OTIPI) at the National Institute on Drug Abuse (NIDA); Karen McConnell, chief pharmacy officer at CommonSpirit Health; Amar Setty, anesthesiologist and chief executive officer at Patient Premier; and David Gastfriend, co-founder and chief medical officer of DynamiCare, to discuss how different types of virtual modalities can support the delivery of comprehensive pain management and SUD care in a hybrid environment.

Levy opened the session with an introduction to digitally enabled care delivery modalities. He noted that while 21 million Americans suffer from SUD, only 4 million receive comprehensive treatment (SAMHSA, 2021); similarly, Setty shared that one in five American suffer from chronic pain, but 95 percent of these patients do not have access to a pain specialist (Dahlhamer et al., 2018). To bridge this treatment gap, Levy described several modalities with potential applications for pain management and SUD care, including:

- Digital diagnostics, broadly defined as algorithm-enabled diagnostic support which can help to anticipate a patient’s reaction to a certain course of treatment or assess risk.
- Digital therapeutics, or the use of evidence-based techniques, such as cognitive behavioral therapy, to deliver therapeutic relief, particularly for the prevention, management, or treatment of chronic behavior-modifiable diseases.
- Remote patient monitoring, which encompasses the collection, evaluation, and transmission of health data from a patient to their provider/team using personal health technologies (e.g., wireless devices, wearable sensors, and mobile apps).
- E-consultations, wherein providers receive remote input and support from specialists, which may help prevent unnecessary travel and reduce wait times.
- Telepharmacy, or the use of telecommunication and other technologies to provide pharmaceutical services to outpatients remotely, which can help to address pharmacist shortages in underserved areas (Levy, 2022).

By integrating these modalities as part of a hybrid approach to pain management and SUD care—which combines in-person, virtual visits, and care coordination and navigation—Levy emphasized the ability to enable higher coordination of multidisciplinary care teams; improve integration of behavioral health services; reduce disparities in health care delivery; expand accessibility; lessen stigma; and drive better health outcomes.

Further, Levy clearly defined digital therapeutics for SUD as using software and data science to prevent, manage, and/or treat a medical disorder or disease; provide behavioral interventions in a standardized, scalable, and cost-effective manner; and augment SUD treatment by improving medication adherence or treatment retention. This definition specifically excludes general wellness apps.

In outlining specific use cases for other virtual modalities, Setty stated that remote patient monitoring tools, like Patient Premier’s Pain Scored platform (Pain Scored, n.d.), provide the opportunity to better connect with patients that often get lost in the system, which is especially important for patients who transition between pain management and SUD care. McConnell described CommonSpirit’s telehealth-supported opioid stewardship program and clinical pharmacy collaborations, for both inpatient services and the transition to ongoing outpatient care. Gastfriend suggested technological solutions can assist in delivering evidence-based approaches, such as contingency management (offered by DynamiCare) and cognitive behavioral therapies (DynamiCare Health, n.d.); expanding access; boosting outcomes; upgrading quality; driving measurement-based care; and facilitating value-based contracting.

Angelone stated these modalities are parts of a complex solution to a complex problem. He described the multiple unique initiatives at NIDA’s OTIPI to translate scientific advances in virtual care into market driven companies, including NIDA’s Small Business Programs, novel funding authorities, strategic alliances, and partnerships for product development (NIDA, n.d.). Without incentives for the tools and associated data, the panelists noted that scaling these modalities would be difficult. Setty noted that “payers determine physician and patient behavior through incentives.” He argued that consistency in payments and integration of care would address many issues in the pain and SUD space while also contributing to greater access to health solutions as well as easier transitions to treatment for high-risk patients. Levy also emphasized that to scale these solutions, the health care sector must think critically and plan for how these tools best fit into clinical workflows. Angelone agreed, noting that the end user needs to be front and center in the design process of these tools.

Panelists also described barriers and obstacles related to seeking U.S. Food and Drug Administration (FDA) approval of tools and technologies. While Angelone noted that FDA approval shouldn’t be the goal for every virtual modality, the effort required to seek FDA approval can
be onerous, both in terms of cost and the time required. Gastfriend stated that the long FDA approval process can lead to companies marketing outdated technologies. Further, in a rapidly changing field, inconsistencies in what does and does not need regulation and approval creates confusion.

Beyond FDA regulation, panelists also discussed that inconsistency among state regulations creates difficulties in applying these solutions at scale while also leading to problems with licensure, payment, and reimbursement. Levy advocated for harmonization among state regulatory authorities, stating that “the individual who’s suffering from chronic pain or SUD and living in California is not all that different from the same individual living in Arizona.” Gastfriend proposed several necessary areas that need to be addressed to advance deployment of new virtual care technologies, including:

- Establishing new billing codes and reimbursement levels;
- Advancing collaborative care incentives and better coordination between addiction treatment and primary care providers;
- Resolving federal and state regulatory obstacles;
- Upgrading licensure and funding to drive standards, data, and outcomes-based quality improvement;
- Facilitating electronic health record (EHR) interoperability; and,
- Establishing standards and quality review processes for new technologies, while also sticking a balance between ensuring patient safety and not over-regulating the industry (Gastfriend, 2022).

Finally, panelists discussed barriers created by the digital divide, or the increasingly growing gap between those who have access to digital technologies and the digital literacy to use them, and those who do not. In addition to education to enhance digital literacy, McConnell advocated for large-scale investment in technology infrastructure to ensure that all those who would benefit from these modalities are able to access them.

Reimagining the Care Team

The second session discussed how telehealth is being used to facilitate and coordinate team-based care in the realms of pain management and SUD care, with presentations from Addison Ragan, Clinical Resource Hub (CRH) pharmacy program manager for the Office of Primary Care at the Veterans Health Administration (VHA), and Tran Tran, a clinical pharmacist who serves on Rush University Medical Center’s Substance Use Intervention Team (SUIT) and associate professor of pharmacy practice at Midwestern University, Chicago College of Pharmacy.

Using the example of the VHA’s CRH TelePain program—a hub-and-spoke model that provides a network of both in-person care and telehealth solutions to support underserved medical facilities in the VHA network and expand access to specialty pain care for rural veteran populations (Glynn et al., 2021)—Ragan described how a hybrid approach can support interdisciplinary pain management teams, consisting of providers from pain and addiction medicine, pharmacy, nursing, rehabilitation medicine, and behavioral health, to best meet patients’ needs (Ragan, 2022). In describing the SUIT approach to comprehensive telehealth-enabled, team-based SUD care (Rush University, n.d.), Tran recommended that the care team also include an inpatient social worker to help facilitate connections to social support services. Further, both Ragan and Tran highlighted the importance of incorporating the patient into the care planning team to enable and empower patients, which can lead to improved treatment adherence, engagement, and outcomes.

However, both Ragan and Tran recognized the challenge in coordinating the various moving parts and people involved in team-based care across both time and space and suggested designating one point person to serve as the coordinating entity. Within the TelePain program, Ragan highlighted the vital role of the nurse care manager, stating “[they] are the glue that holds everything together,” by helping to integrate and coordinate care between the patient, on-site facility (e.g., lab tests, procedures), and telehealth team (e.g., diagnosing, evaluation, medication management, behavioral therapy). Tran noted the importance of providing assistance with technology, and that the SUIT team often relies on a telehealth or pharmacy technician to help set up the technology for both the patient and care team member.

Another key role recognized in both the TelePain and SUIT programs is that of the clinical pharmacist. Ragan and Tran noted many benefits across both pain and SUD care, notably comprehensive medication management (CMM), an evidence-based, patient-centered approach which optimizes medication use, improves health outcomes, and decreases hospitalization rates (CMM in Primary Care Research Team, 2018). Tran advocated for CMM to be formally recognized as a compensated chronic care service, as it can help to maximize performance-based payments and aligns closely with quality improvement initiatives. Similarly, Ragan recommended that a billing code for pharmacy services be established so that pharmacists can continue to be a part of the hybrid, team-based care model, which can help to improve access to specialty care and medication for opioid use disorder (MOUD) as well as improve health equity.
Hybrid Pain and SUD Care Delivery across Care Settings

Building on the concept of multidisciplinary, team-based care, the third session convened Ada Stewart, board chair of the American Academy of Family Physicians; Elizabeth Bentley, director of clinical pharmacy services at Kaiser Permanente; Lewis Nelson, chief of emergency medicine at Rutgers New Jersey Medical School; and Benjamin Nordstrom, chief medical officer of Behavioral Health Group, to discuss how hybrid care delivery for pain and SUD can be integrated across different practice settings, including primary care, pharmacy, emergency department, and OTPs.

Panelists uniformly shared that the COVID-19 PHE served as a catalyst for providers to incorporate telehealth services into their respective practice settings. Stewart noted that prior to the pandemic, only 15 percent of family physicians in the U.S. used some form of telehealth (Moore et al., 2016); however, during the pandemic, that number increased to more than 80 percent (American Academy of Family Physicians, n.d.). This was facilitated by many of the pandemic-related regulatory and payment flexibilities that helped to alleviate barriers to care, including prescribing of MOUD, coverage of audio-only services, and payment parity. This in turn helped to increase access to pain management and SUD care for many patient populations.

However, panelists stated that there are some aspects of care that are less suitable for telehealth across different practice settings. For example, Nelson noted that prescribing of opioids for pain via telehealth may be less appropriate within an emergency department or urgent care setting, given that there is likely less familiarity between the provider and patient and less laboratory and physical examination information that can be gathered in the latter setting. Stewart also suggested that telehealth is less suitable for individuals who are in the process of establishing their pain care plan due to the limitations of virtual physical examinations. Similarly, Nordstrom stated that patients not well established in care may be less appropriate for telehealth in an OTP setting; rather, he suggested telehealth can be a helpful tool in “keeping the line of communication open” for more stable patients. Bentley agreed, noting that telehealth is useful for monitoring and management, as noted in the prior session, as it allows providers to have brief touchpoints to ensure that patients continue to get regular visits, complete required screenings, and address any concerns or difficulties they may have with their treatment plan.

Other barriers to scaling the use of telehealth across different practice settings include regulatory and payment challenges and the digital divide, as described in earlier sessions. Stewart recognized workforce capacity limitations to troubleshoot technology programs as another key challenge. Nelson concurred and also flagged the issue of working across multiple systems, interfaces, and platforms, especially those that are not integrated into the electronic health record (EHR) which makes it difficult to integrate telehealth into clinical workflows. Bentley and Stewart both agreed that EHR interoperability must be a priority moving forward and recommended that providers and health system leaders “advocate for regulatory pathways to be able to have this integration throughout all of our systems.”

Recreating Systems of Care Delivery

In the final session, William Lopez, national medical director for virtual care at Evernorth, a subsidiary of Cigna; Matthew Sakumoto, a virtual-first primary care physician at Sutter Health; and Lindsay Baran, policy director for the National Council on Independent Living, science and policy advisory council member for the National Pain Advocacy Center and a person living with chronic pain, discussed opportunities for recreating new systems of care delivery to advance integrated, hybrid care models and better meet the needs of those living with pain and/or SUD.

Offering the payer perspective, Lopez noted several potential advantages of a hybrid approach for payers, including:

- Increased access and convenience for customers;
- Improved compliance with treatment;
- Better behavioral coaching integration;
- Decreased fragmentation;
- Increased incentives for collaborative care;
- Improved outcomes; and,
- Decreased total cost of care.

However, Lopez also noted several barriers, such as finding the right partners who can offer a broad spectrum of services and that are willing to participate in a value-based relationship as well as navigating regulatory inconsistencies across states on what services providers are able to offer virtually.

Baran said that the rapid shift to telehealth during the pandemic exacerbated existing inequities and barriers for those living with chronic
Improving Care Delivery and Innovation

pain and SUD, such as the digital divide, a lack of disability accommodations, and variations in regulations around the prescribing of opioids for pain and to treat OUD. She noted that the patchwork system of differing federal, state, local, and payer policies creates complications that patients often have to navigate alone. Baran suggested that instead of replicating the same issues during the transition to a hybrid care environment, health system leaders should use this opportunity to think critically of the end-user experience and work to use hybrid care solutions to address these challenges.

One approach to doing so is co-design, which Sakumoto defined as “a method for partnering with patients, consumers, and service users right from the beginning of planning to ensure a closer alignment of service delivery with what will work best for all users.” By leveraging a host of tools, including both asynchronous (e.g., SMS alerts, chatbots, etc.) and synchronous (e.g., video visits, remote patient monitoring, etc.), this opens a lot of avenues for connectivity and “points of access” that can assist with patient navigation, team-based care, triage, and peer support.

However, panelists noted that reimbursement will be a key component to enable co-design and drive new, innovative hybrid models of care moving forward. Lopez provided a list of strategies and best practices for aligning payers and provider incentives, including:

• Quality and performance measurements, similar to the National Committee for Quality Assurance’s Healthcare Effectiveness Data and Information Set (HEDIS);
• Service utilization;
• Total Cost of Care frameworks (rather than only behavioral health spending without medical claims being considered); and,
• Collaborative care metrics, such as process measures, service integration/care transitions, patient outcomes, among others.

Additionally, to overcome some of the policy and regulatory barriers often faced by those living with pain and/or SUD, panelists advocated for the continuation of many of the regulatory-policy flexibilities enacted during the COVID-19 PHE, including alignment on national telehealth policies and expansion of interstate licensure.

Lastly, as panelists envisioned an ideal hybrid state for pain management and SUD care, Baran urged that patients be directly consulted in all aspects of decision-making processes. Other suggestions included the use of remote patient monitoring and improved coordination of data, data sharing, and EHR interoperability.

AREAS OF FUTURE FOCUS AND PRIORITIES FOR ACTION

Helen Burstin, Council of Medical Specialty Societies, and Kelly J. Clark, Addiction Crisis Solutions

This series’ third meeting on telehealth for pain management and OUD/SUD treatment focused on improving care delivery and innovation. The speakers laid out important opportunities for implementation and action that should result in improved care and outcomes for patients.

The authors of this section have identified the following priorities for further discussion and action:

• Consider the importance of incentives for the development and implementation of the wide variety of emerging digital tools. While there has been significant innovation in telehealth for chronic pain and OUD/SUD, there are limited incentives to drive further investment in these tools and the potential downstream data that will be critical to assess patient outcomes. The field would also benefit from more consistent guidance on when submission to FDA for regulatory approval is required and appropriate.

• Innovation on a national scale requires greater consistency across states. The ability to innovate in use of virtual and hybrid care for both pain management and OUD/SUD requires greater consistency across states in terms of both prescribing of opioids for pain and MOUD, as well as greater consistency in the role of the emerging clinical team for these conditions (e.g., role of pharmacists). The variation in access to broadband across cities and states and persistent digital divide will lead to greater inequities.

• Improving care will require a reimagined care model and care team. While not unique to chronic pain management and OUD/SUD treatment, a hybrid, coordinated approach of in-person and various virtual modalities can contribute to improve and better coordinated care for these complex conditions. Virtual care will likely include both synchronous visits as well as asynchronous tools such as chatbots. This emerging model of care will require a re-imagined care team with new roles for key providers, such as nurse care managers to provide coordination of care across brick-and-mortar and virtual visits and labs and virtual opportunities for peer support. Key providers must be educated for the new roles as a fundamental element of practice. Most importantly, there was a clear recognition that this re-imagined model of care should be co-developed with patients to ensure that it will work best for all users.
REFERENCES


DISCLAIMER: This Discussion Proceedings was prepared by Noah Duff, Aisha Salman, and Emma Freiling as a factual summary of what occurred at the meeting and areas of future focus and key themes. The statements made are those of the rapporteurs or individual meeting.
participants and do not necessarily represent the views of all meeting participants; the planning committee; members of the associated program; the National Academy of Medicine; or the National Academies of Sciences, Engineering, and Medicine.

CONFLICTS OF INTEREST: The planning committee for the “Improving Telehealth and Virtual Care for Pain Management and Substance Use Disorders” meetings series, in developing the agenda for this convening, determined that in order to properly understand the current landscape, players, and pain points of telehealth as used to treat substance use disorder and pain, individuals with financial conflicts of interest would need to participate in the discussion. To this end, Kelly J. Clark has a financial conflict of interest in that she reports personal fees from Bicycle Health. These discussion proceedings are not conclusions or recommendations of the National Academy of Medicine or the National Academies of Sciences, Engineering, and Medicine and are but a faithful summarization of discussions held at the convening named above. All statements within are attributable only to the individual they are attributed to or the named author of a section.

REVIEWERS: To ensure that it meets institutional standards for quality and objectivity, this Discussion Proceedings was reviewed by Mark S. Gold, Washington University in St. Louis and Cynthia A. Leaver, American Association of Colleges of Nursing.
