

# Future of Academic Medicine Series

# **Executive Summary**

Sustaining Telehealth Success: Integration Imperatives and Best Practices for Advancing Telehealth in Academic Health Systems

July 2021



Learn

Serve

Lead

Association of American Medical Colleges

### Future of Academic Medicine Series

Academic medicine is on the cutting edge of health care, pioneering groundbreaking medical research, educating tomorrow's physicians, and providing the world's most advanced health care. But changes are happening faster than ever before, whether it's technology, demographics, economics, or politics — changes that can threaten the success of academic medicine. The AAMC Future of Academic Medicine Series includes research-based reports to help leaders consider the changes and strategies needed to survive and thrive.

### AAMC

The AAMC (Association of American Medical Colleges) is a not-for-profit association dedicated to transforming health through medical education, health care, medical research, and community collaborations. Its members are all 155 accredited U.S. and 17 accredited Canadian medical schools; more than 400 teaching hospitals and health systems, including Department of Veterans Affairs medical centers; and more than 70 academic societies. Through these institutions and organizations, the AAMC leads and serves America's medical schools and teaching hospitals and their more than 179,000 full-time faculty members, 92,000 medical students, 140,000 resident physicians, and 60,000 graduate students and postdoctoral researchers in the biomedical sciences. Additional information about the AAMC is available at <u>aamc.org</u>.

## manatt

Manatt Health integrates legal and consulting expertise to better serve the complex needs of clients across the health care system. Combining legal excellence, firsthand experience in shaping public policy, sophisticated strategy insight, and deep analytic capabilities, we provide uniquely valuable professional services to the full range of health industry players. Our diverse team of more than 160 attorneys and consultants from Manatt, Phelps & Phillips, LLP, and its consulting subsidiary, Manatt Health Strategies, LLC, is passionate about helping our clients advance their business interests, fulfill their missions, and lead health care into the future. For more information, visit <u>manatt.com/health</u>.

ISBN: 978-1-57754-202-5

Suggested citation: AAMC, Manatt. Sustaining Telehealth Success: Integration Imperatives and Best Practices for Advancing Telehealth in Academic Health Systems. Washington, DC: AAMC; 2021.

© 2021 Association of American Medical Colleges. May be reproduced and distributed with attribution for educational or noncommercial purposes only.



# Acknowledgments

## Interviewees and Case Study Contributors

The authors wish to thank the following interviewees and case study contributors who generously volunteered their time, insights, and expertise to shape this report and its findings.

Mark Beckstrom, Vice President and Director, Government Relations, Ochsner Health

Bill Beninati, MD, Intermountain Healthcare

Christopher Cable, MD, Executive Director of Operations, Telehealth and Access Management, Kaiser Permanente Washington

Rebecca Canino, Administrative Director of Telemedicine, Johns Hopkins Medicine

Saurabh Chandra, MD, Chief Telehealth Officer, University of Mississippi Medical Center

Shruti Chandra, MD, MEHP, Emergency Medicine, Jefferson Health

Laura Christopherson, Operations Manager, Mayo Clinic

Bart Demaerschalk, MD, Chair, Division of Stroke and Cerebrovascular Diseases, Department of Neurology, Mayo Clinic

Katie Duerr, Senior Manager for Market Development and Digital Health, Stanford Health Care

Tania Elliott, MD, FAAAAI, FACAAI, CMO, Ascension Health

Neil Evans, MD, Chief Officer, Office of Connected Care, Veterans Health Administration Elizabeth Fleming, Vice President, Kaiser Permanente Washington

Kevin Galpin, MD, Executive Director, Telehealth Services, Veterans Health Administration

Julie Hall-Barrow, EdD, Senior Vice President, Network Development and Innovation, Children's Health

Brian Hasselfeld, MD, Medical Director, Digital Health and Telemedicine for the Office of Johns Hopkins Physicians, Johns Hopkins Medicine

Julie Henry, Chief Operations Officer, Digital Medicine, Ochsner Health

Judd Hollander, MD, Associate Dean for Strategic Health Initiatives, Sidney Kimmel Medical College, Jefferson Health

David Houghton, MD, System Chair, Telemedicine, Ochsner Health

Helen Hughes, MD, Assistant Medical Director, Office of Telemedicine, Johns Hopkins Medicine

Adam Licurse, MD, Executive Director, Virtual Care, Brigham Health

James T. McElligott, MD, MSCR, Medical Director for Telehealth, Medical University of South Carolina Paul Minardi, MD, CEO and President, The Washington Permanente Medical Group

Chris O'Dell, Administrative Director, Digital Health, Stanford Health Care

Kerry Palakanis, DNP, APRN, Executive Director, Connect Care Operations, Intermountain Healthcare

April Radford, Vice President, Telemedicine, Ochsner Health

Peter Rasmussen, MD, Chief Clinical Officer, The Clinic by Cleveland Clinic

John Scott, MD, MSc, Medical Director, Digital Health, University of Washington

Frank Sites, Vice President, Connected Care Operations, Jefferson Health

Emily Warr, MSN, RN, Administrator for the Center for Telehealth, Medical University of South Carolina



## AAMC Telehealth Advisory Committee Members

The authors wish to thank the AAMC Telehealth Advisory Committee for their thoughtful input in developing the frameworks included in this report, their feedback on the report itself, and their continued engagement and participation in advancing the AAMC's telehealth agenda.

Rebecca Canino, Administrative Director, Telemedicine, Johns Hopkins Medicine

Shruti Chandra, MD, MEHP, Program Director, Digital Health and Telehealth Education, and Associate Professor, Jefferson Health

Neil Evans, MD, Chief Officer, Office of Connected Care, Veterans Health Administration

Kevin Galpin, MD, Executive Director, Telehealth Services, Veterans Health Administration

Nate Gladwell, RN, MHA, Senior Director, Clinical Operations Officer, University of Utah Hospitals and Clinics

Emily Hayden, MD, MHPE, Director of Telemedicine, Massachusetts General Hospital Kristi Henderson, DNP, Senior Vice President, Center for Digital Health and Innovation, Optum Health

Toyia James-Stevenson, MD, MBS, Medical Director, GI Access, GI Quality, and Women's GI and Associate Professor of Clinical Medicine, Indiana University

Andrea Borondy Kitts, MS, MPH, Lung Cancer and Patient Advocate

Elizabeth Krupinski, PhD, Professor and Vice Chair of Research, Emory University

Joseph Kvedar, MD, Senior Advisor, Virtual Care, Mass General Brigham and Professor of Dermatology, Harvard Medical School

Curtis Lowery, MD, Former Director, Institute for Digital Health and Health Innovation, University of Arkansas for Medical Sciences and President, SEARCH Society Courtney Lyles, PhD, Associate Professor, Division of General Internal Medicine, UCSF

James Marcin, MD, MPH, Director, Center for Health and Technology, UC Davis

Kimberly Noel, MD, MPH, Clinical Assistant Professor, Stony Brook Medicine

Karen Rheuban, MD, Senior Associate Dean for CME and External Affairs, Director for the Center of Telehealth, University of Virginia

Ariel Santos, MD, MPH, FRSCS, FACS, Director, Texas Tech Telemedicine Program, Texas Tech University

Neal Sikka, MD, Chief, Section of Innovative Practice and Professor of Emergency Medicine, GW Medical Faculty Associates

## **Report Authors**

Jared Augenstein, MPH, MA, Director, Manatt Health Strategies

Alexa Picciotto, MBA, MPH, Consultant, Manatt Health Strategies Tom Enders, MBA, Senior Managing Director, Manatt Health Strategies

Scott Shipman, MD, MPH, Director of Clinical Innovations, AAMC

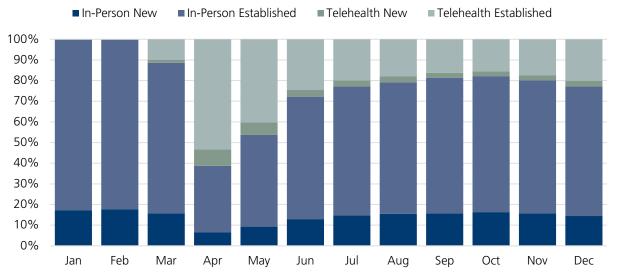
Sarah Hampton, Program Specialist, AAMC

Janis Orlowski, MD, MACP, Chief Health Care Officer, AAMC



# **Executive Summary**

The COVID-19 pandemic has dramatically and permanently altered the telehealth landscape for teaching hospitals, also known as academic medical centers (AMCs). While many AMCs had begun to offer telehealth services before the pandemic, uptake was negligible — telehealth visits represented less than 1% of total AMC ambulatory volume. At the height of the pandemic in April 2020, telehealth visits surged to over 50% of all faculty practice plan evaluation and management (E/M) visits (Figure E.1).<sup>1</sup> During this time, telehealth-use cases proliferated across a wide range of conditions and levels of acuity, ranging from asynchronous consultations for low-acuity needs to hospital-at-home programs for tertiary-level care to remote patient monitoring (RPM) for chronic disease management. Recognizing an opportunity to sustain adoption, many AMCs are setting future telehealth volume targets at 20%-30% of overall ambulatory visits.





Now that telehealth has become a widely accepted mode of delivering care, AMCs are examining the role of telehealth to advance their overarching strategic goals. Whereas pre-pandemic AMC telehealth programs often operated as pilot projects or small stand-alone programs, AMCs must learn how to integrate telehealth capabilities into the fabric of their organizations so they become part of everyday clinical care and operations. This will require prioritizing telehealth capabilities based on overall strategic priorities, organizing telehealth appropriately within the organization, and successfully integrating telehealth throughout the entire organization and across all mission areas — clinical, research, teaching, and community engagement.



<sup>1</sup>Based on AAMC analysis of physician and non-physician claims billed by Faculty Practice Plan members of the Clinical Practice Solutions Center (CPSC). The CPSC is a product of the AAMC and Vizient that collects billing data from member practice plans to provide benchmarks and help them improve performance. Eighty-one CPSC members had shared their claims data through December at the time of this analysis (June 2021). "E/M visits" includes all in-person and telehealth claims with CPT codes 99201-5 (new) and 99211-5 (established) across all applicable places of service, specialties, and payers. Telehealth visits were identified based on the modifiers 95, GT, GQ, and G0 and/or a place of service of 02.

Sustaining Telehealth Success: Integration Imperatives and Best Practices for Advancing Telehealth in Academic Health Systems



AMCs will face several challenges in building market-leading telehealth programs. The shift to value-based payment models is occurring while telehealth reimbursement has yet to solidify. New entrants fueled by venture capital are offering services such as hospital-at-home care, RPM, and remote second opinions, which could disrupt AMC-patient relationships that have historically been geographically constrained. And patient expectations for excellent digital experiences have never been higher as Amazon and a host of other virtual-first services increasingly pervade every corner of our lives.

Most, if not all, AMCs will concurrently pursue multiple clinical strategies to meet their organizational goals and effectively serve their communities. These clinical strategies include optimizing hospital-level care, distributing access to specialty and primary care, managing population health, and improving community and public health status. Telehealth can support each strategy for meeting organizational goals.

#### Once the balance among priority

#### Will AMCs Lead on Telehealth?

The shift to virtual care creates enormous opportunity. Some AMCs will lead, and others will become sorely challenged. All will be forced to confront nontraditional competitors. The future market for virtual care will not be geographically bound. Indeed, as highlighted in this report, AMCs have successfully developed virtual second opinion, virtual consult, RPM, and virtual visit programs that are national (and in some cases international) in scope and ambition. AMCs that seize the opportunity will use telehealth to achieve regional and national scale and will compete on this basis for services that can be delivered at a distance.

AMCs that emerge as national leaders will be characterized by the following attributes:

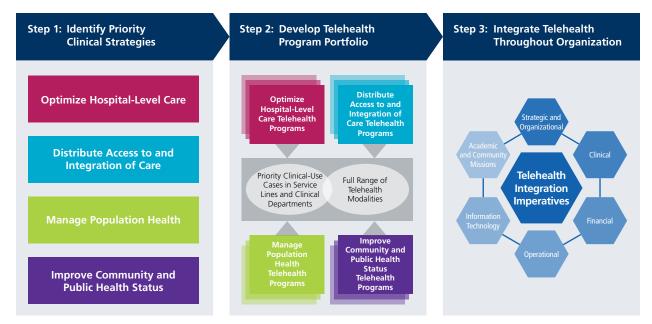
- Having the proven ability to design innovative and highimpact virtual care models.
- Having a close alignment between telehealth operations and research to test new models, publish findings on their effectiveness, and improve them over time.
- Able to scale models regionally and nationally (a historical challenge for many AMCs).
- Able to be a purposeful and coherent telehealth organization that works in an integrated fashion across service lines and disciplines to operationalize telehealth services at scale.

clinical strategies is determined, AMCs should develop several telehealth programs that advance each clinical strategy and together form a portfolio of telehealth solutions (Figure E.2). Investments in telehealth programs will be made based on high-priority and highpotential clinical-use cases and will span the full range of telehealth modalities (e.g., virtual visits, e-consults, virtual consults, RPM). For example, an AMC may deploy a tele-intensive care (tele-ICU) program to advance its strategy of optimizing hospital-level care, a diabetesmanagement RPM program to drive its strategy of managing population health, and a school-based virtual visit program to support its strategy of improving community and public health status. As they consider the investments needed, leaders will need to critically evaluate telehealth's ability to drive operational efficiencies, improve clinical quality and patient outcomes, and enhance the patient experience, each of which can drive financial results.



### Sustaining Telehealth Success: Integration Imperatives and Best Practices for Advancing Telehealth in Academic Health Systems





### Figure E.2. Telehealth program portfolio development and integration imperatives.

Through our interviews with national leaders, we identified six integration imperatives for building successful telehealth programs (Figure E.3).

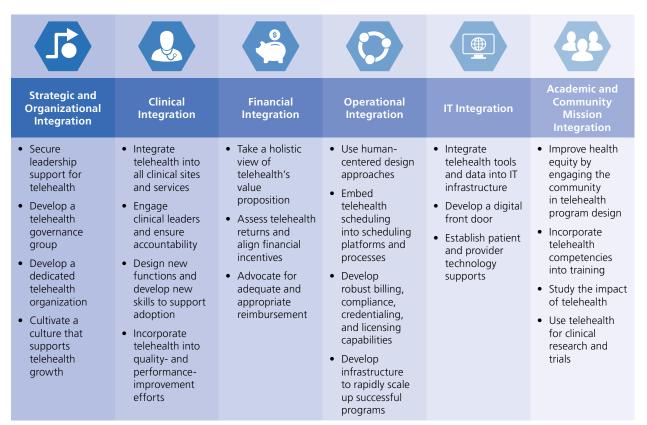


Figure E.3. Telehealth integration imperatives.



Critical integration imperatives include cultivating a culture that fosters telehealth innovation, recognizing that driving telehealth adoption requires new skills and new roles, aligning financial incentives, using human-centered design approaches in program design, integrating tools and data with IT infrastructure, and systematically incorporating telehealth into medical education and community engagement programs. Acting on these imperatives will advance AMCs along the telehealth-adoption curve and mitigate barriers to successful implementation and program expansion.

AMCs can also play a critical and unique role in advancing the field of telehealth by effectively linking clinical, education, research, and community missions. Clinical innovations in telehealth should be studied to build the evidence base for virtual care and the roles it can play in advancing high-value care. Expertise in training will help ensure the necessary skills for telehealth care are incorporated into future best-practice care models.

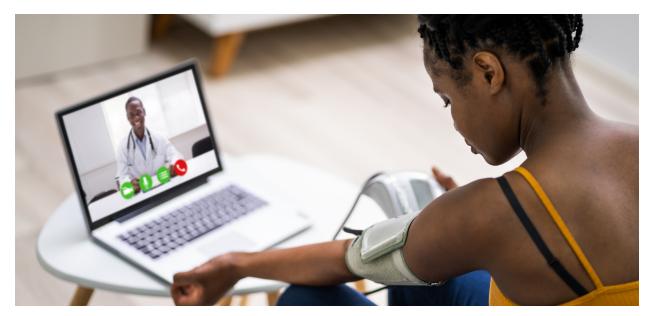
This report is meant to serve as a practical guide for health system leaders and telehealth managers as they critically assess, design, implement, and integrate their telehealth programs across all mission areas. We interviewed leaders at 15 AMCs that have leading telehealth programs and sought critical feedback from the AAMC Telehealth Advisory Committee.

Section 1 of the report is an overview of commonly used AMC clinical strategies and details how each strategy can be uniquely advanced through telehealth program development. Section 2 summarizes six integration imperatives that are critical to successfully interweaving telehealth capabilities throughout the operations of all AMC mission areas. Section 3 profiles the clinical strategies, telehealth programs, and integration successes of four telehealth leaders: Medical University of South Carolina Health (MUSC Health), Kaiser Permanente Washington, Stanford Health Care, and Ochsner Health. Finally, Section 4 provides a self-assessment for applying the frameworks and recommendations outlined in this report to your organization.



Figure E.4. Telehealth is a subset of digital health.

Our hope is that by sharing these findings and successful practices, AMC leaders will be able to take a wellinformed approach to developing telehealth opportunities that are aligned with system goals and priorities and to thoughtfully integrate telehealth capabilities within their organizations.





### Association of American Medical Colleges 655 K Street, NW, Suite 100, Washington, DC 20001-2399 T 202 828 0400 aamc.org

21-024 (07/21)