

September 26, 2025

Rural Health Transformation Program Team
Rhode Island Executive Office of Health and Human Services
3 West Road
Cranston, RI 02920

RE: Comments for the Rural Health Transformation Program Team on the Development of Rhode Island's Rural Health Transformation Plan

To the Rural Health Transformation Program Team:

Thank you for the opportunity to provide comments on the development of Rhode Island's Rural Health Transformation Plan. We appreciate the Rural Health Transformation Program Team's efforts to seek community input on how the state can identify priority needs, gaps, and opportunities to transform rural health care.

My name is Dr. Ateev Mehrotra, and I am Chair of the Department of Health Services, Policy, and Practice at the Brown University School of Public Health. My research focuses on delivery innovations such as retail clinics, e-visits, and telemedicine, and assessing their impact on quality, costs, and access to health care. This comment letter is informed by relevant research conducted by me and other colleagues, as well as other research from the Brown School of Public Health and outside organizations.¹

The Rural Health Transformation program represents a remarkable opportunity to meaningfully expand healthcare access in rural areas, as well as across Rhode Island. Before describing specific initiatives, I want to propose two foundational principles that I believe should underlie the state's approach.

1) Support Existing Clinicians.

Traditional efforts to improve rural primary care access typically focus on recruiting clinicians to underserved areas through loan repayment programs and financial incentives. While these strategies have merit, there are also concerns about their long-term sustainability. Alternatively, the state could support clinicians already in practice by reducing their clinical and administrative burdens. When we streamline workflows and eliminate unnecessary tasks, we enable clinicians to serve more patients effectively while reducing burnout and extending their careers. The initiatives proposed below are designed around this principle.

2) Target Technologies to Improve Access.

Technology alone cannot solve rural access challenges. Consider telemedicine. While many assume it will bridge geographic gaps between rural patients and urban specialists, the reality is more complex. Busy

¹The opinions and conclusions expressed in this comment letter are the author's alone and do not reflect those of Brown University, the Brown University School of Public Health or any of the research sponsors.

clinicians with full schedules typically use telemedicine to serve their existing patient panels more efficiently, rather than expanding their reach to new rural populations. Consequently, current telemedicine deployment shows limited evidence of increasing rural patients' access to urban providers. If anything, my ongoing research finds that growing telemedicine use may have exacerbated rural-urban disparities.

To achieve meaningful impact, we must deploy new technologies strategically—targeting specific communities, workflows, and use cases where they can demonstrably improve access rather than simply digitizing existing processes.

The following initiatives align with these principles and offer concrete pathways to expand rural healthcare access.

1) Deploy statewide remote patient monitoring hubs for chronic conditions.

Remote patient monitoring leverages digital technologies to collect and transmit patient health data from outside traditional clinical settings to healthcare providers for assessment and clinical decision-making.² Patients use connected medical devices—including continuous glucose monitors, blood pressure cuffs, pulse oximeters, and various sensors—alongside self-reported symptoms that are transmitted electronically to clinicians via Wi-Fi or Bluetooth technology. Clinicians then monitor this data, identify abnormal values, and adjust medications accordingly.

Remote patient monitoring fundamentally changes the traditional clinical model. Rather than a reactive approach where clinicians wait for patients to present with problems, this proactive model enables immediate issue identification and patient contact. Instead of limiting care to 3-4 visits in a year, remote monitoring provides 365-day-a-year support with frequent care adjustments. This consumer-centric approach allows patients to remain in their homes while maintaining connection to their care teams.

Remote patient monitoring has been widely accepted across payers from Medicare, Medicaid, and nearly all commercial payers.^{3,4} It is reimbursed through monthly bundled payments, rather than traditional fee-for-service models. Adoption has surged across payers in recent years; Medicare usage alone has increased tenfold since from 2019 to 2023.⁵

² Centers for Medicare & Medicaid Services. “Remote Patient Monitoring.” <https://www.cms.gov/medicare/coverage/telehealth/remote-patient-monitoring>.

³ Tang, Mitchell, Ateev Mehrotra, and Ariel D. Stern. “Rapid Growth Of Remote Patient Monitoring Is Driven By A Small Number Of Primary Care Providers: Study examines the growth of remote patient monitoring.” *Health Affairs* 41.9 (2022): 1248-1254.

⁴ Pauly, Nathan, Puja Nair, and Jared Augenstein. “Remote physiologic monitoring use among medicaid population increased, 2019–21: study examines remote physiologic monitoring trends among the Medicaid population.” *Health Affairs* 43.5 (2024): 701-706.

⁵ Peterson Center on Healthcare. “Evolving Remote Monitoring.” April 2025. <https://petersonhealthcare.org/wp-content/uploads/sites/7/2025/04/Peterson-Evolving-Remote-Monitoring-Report-1.pdf>.

Growing evidence demonstrates that remote patient monitoring improves outcomes for patients with common chronic conditions such as Type 1 diabetes, Type 2 diabetes, and hypertension.^{6, 7, 8} This can be expanded to other chronic conditions, including heart failure and post-surgical recovery. There is also promising work that demonstrates patient monitoring can be used for patients with chronic pain management.⁹

However, implementation challenges persist. To date, most remote patient monitoring is managed by primary care clinicians. Primary care practices have struggled to restructure operations to manage the influx of data and allocate time for care adjustments.¹⁰ Some large health systems have addressed this by centralizing remote monitoring in dedicated hubs, rather than burdening individual primary care clinicians with managing the data and making care adjustments. These hubs are staffed by nurse practitioners and physicians who fully manage the chronic condition being treated. However, those hubs are limited to only primary care clinicians who work in large health systems, therefore excluding many smaller practices.

The state could use Rural Health Transformation funds to support the launch of several statewide remote patient monitoring hubs. These hubs would be a set of clinicians who devote their time just to remote patient monitoring for patients throughout the state. Because these clinicians would be specialized in remote patient monitoring, they would be able to easily address the management of data and have the time to make frequent care adjustments. The Rural Health Transformation funds could include financial support for the initial technology investments, along with engagement with vendors to deploy devices in patients' homes. To encourage the use of these hubs, rural primary care practices could receive financial incentives to refer patients with diabetes, hypertension, heart failure, and asthma to these specialized hubs. While the model may not suit all patients, the hope is that the majority of patients in rural communities with common chronic illnesses would receive their care from one of these remote patient monitoring hubs. Successful implementation would require care coordination to ensure primary care clinicians remain informed of hub-initiated changes and maintain bidirectional communication.

This *innovative care model* addresses many of CMS's calls for the use of Rural Health Transformation funds. (All applicable CMS-identified priorities are emphasized in italics here.) CMS has specifically identified *remote monitoring* as a potential innovation. This is a *consumer-facing technology-driven solution* for the *management of chronic illness*. It is also an evidence-based solution that has been proven effective. Clinicians have already demonstrated they like the model and therefore is clearly *sustainable*. Remote patient monitoring is paid using bundled monthly payments, *an alternative payment model*. And

⁶ Tang, Mitchell, et al. "Effects of remote patient monitoring use on care outcomes among medicare patients with hypertension: an observational study." *Annals of internal medicine* 176.11 (2023): 1465-1475.

⁷ Martens, T., Beck, R. W., Bailey, R., Ruedy, K. J., Calhoun, P., Peters, A. L., ... & MOBILE Study Group. (2021). Effect of continuous glucose monitoring on glycemic control in patients with type 2 diabetes treated with basal insulin: a randomized clinical trial. *Jama*, 325(22), 2262-2272.

⁸ Lee, Puikwan A., Geva Greenfield, and Yannis Pappas. "The impact of telehealth remote patient monitoring on glycemic control in type 2 diabetes: a systematic review and meta-analysis of systematic reviews of randomised controlled trials." *BMC health services research* 18.1 (2018): 495.

⁹ Kroenke K, Krebs EE, Wu J, Yu Z, Chumbler NR, Bair MJ. Telecare collaborative management of chronic pain in primary care: a randomized clinical trial. *JAMA*. 2014 Jul 16;312(3):240-8. doi: 10.1001/jama.2014.7689. PMID: 25027139.

¹⁰ Hailu, Ruth, et al. "Challenges and facilitators in implementing remote patient monitoring programs in primary care." *Journal of General Internal Medicine* 39.13 (2024): 2471-2477.

this model would also offload an activity that takes up time for many primary care clinicians, freeing up their time to care for their patients.

2) Assist rural primary care clinicians with switching to ambient AI for note taking.

Among all large language model applications in healthcare, ambient artificial intelligence (AI) for clinical documentation has emerged as the most widely adopted innovation. This technology automatically captures and transcribes patient-physician conversations during medical encounters, generating structured clinical documentation without requiring active clinician input. The system operates passively in the background during appointments, processing clinical discussions to produce draft medical notes, treatment plans, and progress notes that clinicians can review and finalize within their electronic health record systems.

Ambient AI is gaining in popularity primarily because it significantly reduces documentation time.¹¹ Research demonstrates multiple benefits: improved clinician satisfaction, decreased after-hours time spent in electronic health records, and potential reductions in physician burnout.^{12, 13}

Despite growing vendor availability and Epic's recent integration of ambient AI as a standard electronic medical record feature, smaller rural practices likely face potential exclusion due to cost barriers. To address this, Rhode Island could establish support programs to help rural practices access and implement this transformative technology, ensuring equitable access to documentation efficiency across all practice settings.

This switch also addresses many of CMS's calls for the use of Rural Health Transformation funds. It involves the use of *artificial intelligence*, which is a specific focus of this program. Clinicians have already demonstrated they like the model, demonstrating its *sustainability*. CMS has called for projects that involve *technology assistance* and help with software and hardware. It is a *patient-centric model*, addressing the common patient complaint that clinicians are too busy looking at their computers and not engaging with them directly. It also offloads time for primary care clinicians, allowing them to spend more time on patient care.

3) Create a statewide eConsult system.

Electronic consultations, or "eConsults," enable primary care clinicians to seek specialist advice through secure digital platforms without requiring in-person specialist appointments. Through these systems, primary care providers submit patient cases with relevant clinical information, images, or test results to

¹¹ Duggan MJ, Gervase J, Schoenbaum A, Hanson W, Howell JT 3rd, Sheinberg M, Johnson KB. Clinician Experiences With Ambient Scribe Technology to Assist With Documentation Burden and Efficiency. *JAMA Netw Open*. 2025 Feb 3;8(2):e2460637. doi: 10.1001/jamanetworkopen.2024.60637. PMID: 39969880; PMCID: PMC11840636.

¹² Tierney, Aaron A., et al. "Ambient artificial intelligence scribes: learnings after 1 year and over 2.5 million uses." *NEJM Catalyst Innovations in Care Delivery* 6.5 (2025): CAT-25.

¹³ You JG, Dbouk RH, Landman A, et al. Ambient Documentation Technology in Clinician Experience of Documentation Burden and Burnout. *JAMA Netw Open*. 2025;8(8):e2528056. doi:10.1001/jamanetworkopen.2025.28056.

specialists, who then provide written recommendations, treatment guidance, or determine whether face-to-face consultation is necessary.¹⁴

The benefits to eConsults can be substantial: faster access to specialist expertise (often within days rather than weeks or months), reduced patient wait times and travel requirements, improved care coordination between providers, and more efficient allocation of specialist time for cases not requiring in-person evaluation.^{15, 16, 17} eConsults also maintain patients within their primary care medical home while ensuring appropriate specialist input, potentially enhancing patient satisfaction and care continuity.

Medicare and numerous other payers now reimburse eConsults, leading to widespread adoption across large academic health systems, including Brown Health.¹⁸ However, in the U.S. deployment is generally within individual health systems, excluding many non-academic hospitals, independent practices, and specialists. In contrast, Ontario, Canada, created eConsult Ontario as a province-wide platform that connects smaller practices and independent providers.¹⁹

Rhode Island could apportion Rural Health Transformation funds to replicate Ontario's successful model in Rhode Island. Implementation would require resources to establish the necessary technological infrastructure that would enable all primary care clinicians to access the system, as well as developing a staffing framework for specialists to efficiently review and triage incoming consultations. Equally important would be ensuring that the model can be implemented in coordination with the major health insurers in the state. This statewide approach would ensure equitable access to specialist expertise, regardless of practice size or affiliation. Rural Health Transformation funds could be devoted to building the infrastructure for this initiative, and the system could be maintained via specialists billing for the eConsults to Medicare and commercial payers.

This innovative eConsult model also addresses many of the specific uses CMS has requested for Rural Health Transformation funds. This *technology-enabled model* is already commonly used in many health care systems in the U.S., and the availability of reimbursement codes makes it *sustainable*. It is patient-centric, since roughly a quarter of specialty referrals no longer require an in-person visit. And it

¹⁴ Vimalananda VG, Gupte G, Seraj SM, Orlander J, Berlowitz D, Fincke BG, Simon SR. Electronic consultations (e-consults) to improve access to specialty care: a systematic review and narrative synthesis. *J Telemed Telecare*. 2015 Sep;21(6):323-30. doi: 10.1177/1357633X15582108.

¹⁵ Gaye M, Mehrotra A, Byrnes-Enoch H, et al. Association of eConsult Implementation With Access to Specialist Care in a Large Urban Safety-Net System. *JAMA Health Forum*. 2021;2(5):e210456. doi:10.1001/jamahealthforum.2021.0456.

¹⁶ Vimalananda VG, Gupte G, Seraj SM, Orlander J, Berlowitz D, Fincke BG, Simon SR. Electronic consultations (e-consults) to improve access to specialty care: a systematic review and narrative synthesis. *J Telemed Telecare*. 2015 Sep;21(6):323-30. doi: 10.1177/1357633X15582108.

¹⁷ Thielke A, King V. "Electronic Consultations (eConsults): A Triple Win for Patients, Clinicians, and Payers." June 2020. *The Milbank Memorial Fund*.

<https://www.milbank.org/publications/electronic-consultations-a-triple-win-for-patients-clinicians-and-payers/>.

¹⁸ Mann S. "eConsults Reduce Need for Specialty Referrals." May 2017. *The Association of American Medical Colleges*. <https://www.aamc.org/news/econsults-reduce-need-specialty-referrals>.

¹⁹ Guglani S, Liddy C, Afkham A, Mitchell R, Keely E. The Ontario Electronic Consultation (eConsult) Service: Cross-sectional Analysis of Utilization Data for 2 Models. *JMIR Form Res*. 2022 Apr 22;6(4):e32101. doi: 10.2196/32101. PMID: 35451985; PMCID: PMC9077515.

prevents patients from having to travel for specialty care—a critical issue for rural communities such as Block Island.

4) Introduce “digital health hubs” in all rural practices.

While telemedicine has become standard care in the U.S., many clinicians view it as inadequate for numerous clinical situations because they cannot perform key components of in-person visits, such as auscultation (listening to heart and lung sounds), throat visualization (using otoscopes), and essential tests such as EKGs and glucose measurements.²⁰ This limitation in the technology has concentrated telemedicine use primarily to specific conditions like mental health disorders. The use of telemedicine in Rhode Island reflects the national pattern here. The Block Island Health Center and many rural practices have dedicated rooms for telemedicine visits, but these spaces are predominantly used for mental health consultations.

The state could consider explaining and enhancing these existing spaces by establishing comprehensive digital health hubs in rural practices. Each of these health hubs could include space dedicated to telemedicine with the necessary audio-video equipment along with digital stethoscopes, digital otoscopes, EKG machines, remote ultrasound devices, and point-of-care testing equipment. Successful implementation would also require seamless electronic health record integration to ensure proper documentation and care coordination.

Equally critical is the deployment of telepresenters.²¹ These are trained staff positioned at the patient's side to assist with technology operation and testing procedures. For example, when a physician needs to assess heart sounds, the telepresenter can properly position the digital stethoscope and facilitate audio transmission to the remote clinician. This human-technology interface ensures that remote consultations can achieve diagnostic capabilities comparable to traditional in-person visits, particularly benefiting rural communities with limited access to specialist care.

The use of digital health hubs also touches upon many funding priorities outlined by CMS. It is a *technology-enabled solution* that facilitates a greater scope of care in rural communities. It involves *technical assistance, hardware*, and a significant investment in information technology to improve health outcomes. In addition, the deployment of these hubs would involve the recruitment and retention of a different type of clinical workforce, which could help to *right-size the health care system* in rural areas. It is also *sustainable*, given that payment for telemedicine visits is widespread, and it is *patient-centered*, given it allows patients to receive the care they need in their primary care home.

We appreciate the opportunity to provide feedback on this critical issue, and we appreciate the Rural Health Transformation Program Team's efforts to identify priority needs, gaps, and opportunities to

²⁰ SteelFisher GK, McMurtry CL, Caporello H, Lubell KM, Koonin LM, Neri AJ, Ben-Porath EN, Mehrotra A, McGowan E, Espino LC, Barnett ML. Video Telemedicine Experiences In COVID-19 Were Positive, But Physicians And Patients Prefer In-Person Care For The Future. *Health Aff (Millwood)*. 2023 Apr;42(4):575-584. doi: 10.1377/hlthaff.2022.01027. PMID: 37011316; PMCID: PMC11154740.

²¹ Sikka N, Combs D, Lum N, Curry KE. Layperson Telepresenters: Increasing Capacity for Telehealth in Underserved Communities. *Telemed J E Health*. 2021 Jan;27(1):99-101. doi: 10.1089/tmj.2019.0316. Epub 2020 May 18. PMID: 32423355.

transform rural health care. We welcome the opportunity to engage further or provide additional data as needed. Should you have any questions about my comments, please contact me at ateev_mehrotra@brown.edu, or Nathan Hostert, Assistant Director for State Health Policy, at nathan_hostert@brown.edu.



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