



Telehealth & Remote Patient Monitoring

Vanderbilt Transplant Advanced Practice Provider Symposium
October 11, 2022

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Key Takeaways

- Telehealth Market Trends
- VUMC Telehealth Trends
- Reimbursement and Regulatory Updates
- Use Cases, Efficacy, and Value Proposition
- Remote Patient Monitoring



Telehealth Market Trends

Utilization has stabilized

- McKinsey data suggests that telehealth claims have stabilized to 13-17% across specialties, with substantial variation across specialties

Large retailers offer Virtual First options

- Walmart launched its virtual care service in May
- CVS announced their Virtual Primary Care in May

Health systems forge partnerships with vendors

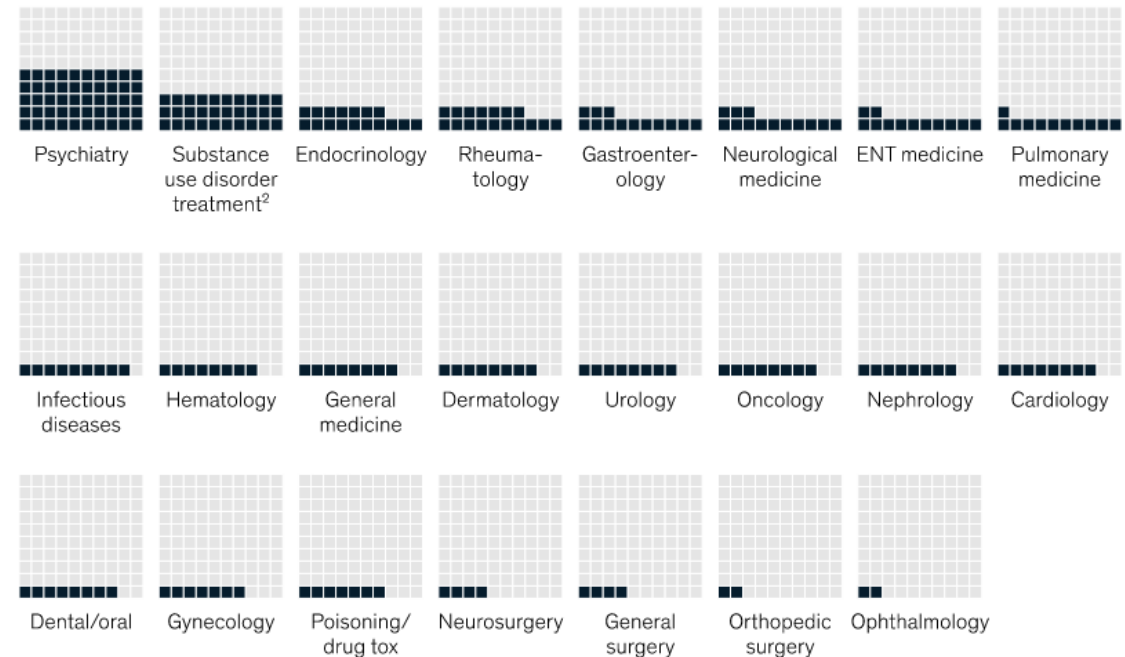
- Tufts and Amazon Web Services
- Boston Children's and Summus Global (2nd opinions)

Consumer preference data is available

- 2021 survey of ~2,000 respondents found that 66% preferred at least some video telehealth in the future; when faced with a choice of in-person or telehealth, 53% chose an in-person visit

Substantial variation exists in share of telehealth claims across specialties.

Share of telehealth of outpatient and office visit claims by specialty (February 2021¹), %



¹ Includes only evaluation and management claims; excludes emergency department, hospital inpatient, and psychiatry inpatient claims; excludes certain low-volume specialties.

² Also includes addiction medicine and addiction treatment.

Source: Compile database; "Telehealth: A quarter-trillion-dollar post-COVID-19 reality?" May 2020, McKinsey.com; McKinsey analysis

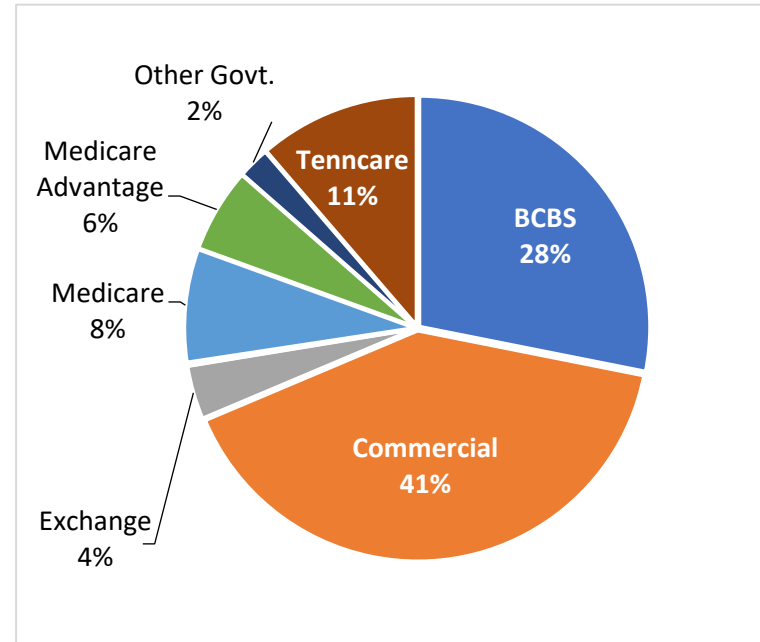
McKinsey
& Company

VUMC Telehealth Trends

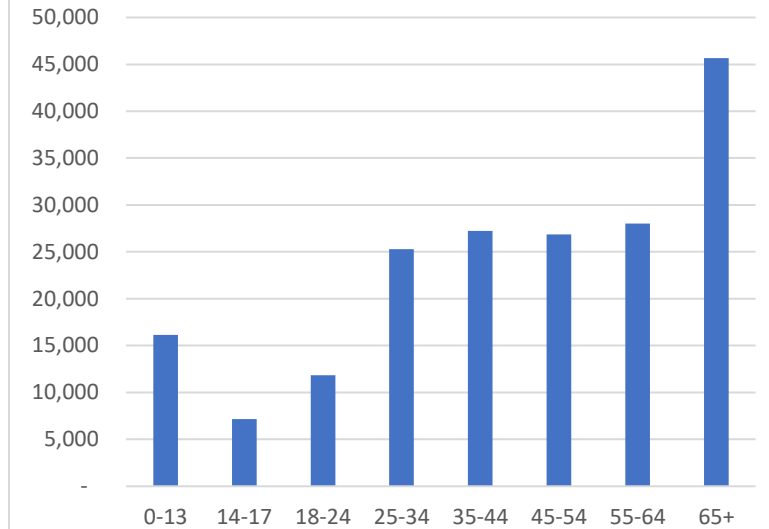
Utilization by PCC

PCC	% of Total Visits
BEHAVIORAL HEALTH	60.5%
PM AND R	23.4%
CORPORATE HEALTH	14.3%
NEUROSCIENCES	13.9%
SURGERY	13.7%
N/A	13.0%
MEDICINE	12.4%
TRAUMA	7.5%
TRANSPLANT	6.1%
PRIMARY CARE	4.9%
LUNG	4.5%
PEDIATRICS	3.7%
CANCER	3.6%
WOMENS HEALTH	2.8%
HEART AND VASCULAR	2.2%
UROLOGY	1.4%
OTOLARYNGOLOGY	1.3%
DERMATOLOGY	1.0%
ORTHOPAEDICS	0.8%
OPHTHALMOLOGY	0.2%

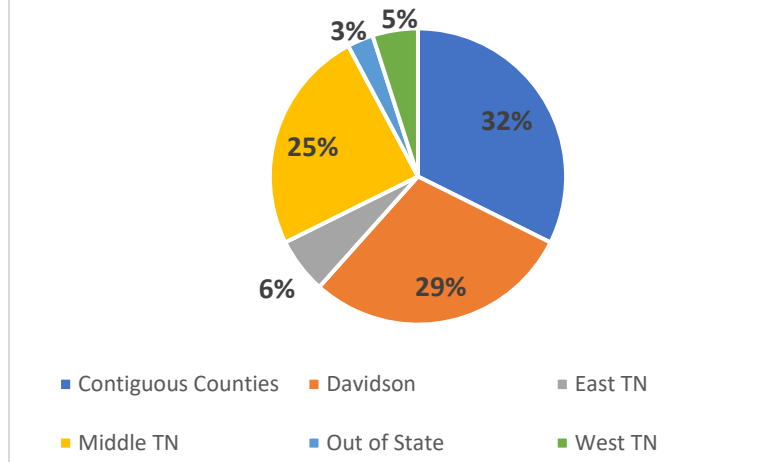
Telehealth Payor Mix



FY22 Telehealth Utilization by Age



FY22 Telehealth Utilization by Region



During the Public Health Emergency

What is a Public Health Emergency period?

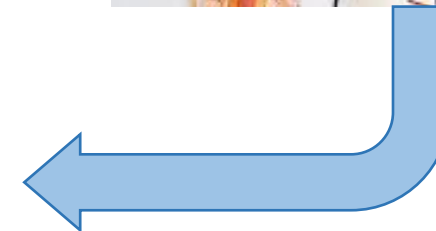
A 90-day period during which federal waivers are in place provide emergency support . The Department of Health and Human Services can renew/extend at any time during that 90-day period.

How did the PHE enable telehealth?

- Expanded approved technology platform options
- Eliminated originating site restrictions
- Additional distant site providers: allows therapists, audiologists, genetic counselors, etc. to provide billable telehealth services
- Includes reimbursement for 'phone only' visits

When does the PHE period expire? January 13, 2022

This time last year...



Payor and Legislative Updates

Federal Payors

- No announcement within 60 days of the PHE end date (October 13, 2022), indicates that the PHE will be extended again; likely until January 13, 2023.
- A 151-day wind-down period begins after the official end date.

Tricare

- Recently announced plans to continue D2P telehealth coverage regardless of federal payor requirements.

Tennessee Legislation

- Updated law has no end date and includes payment parity and home (or patient's preferred location) as an originating site. Applies to all commercial and Medicaid plans operating in Tennessee.

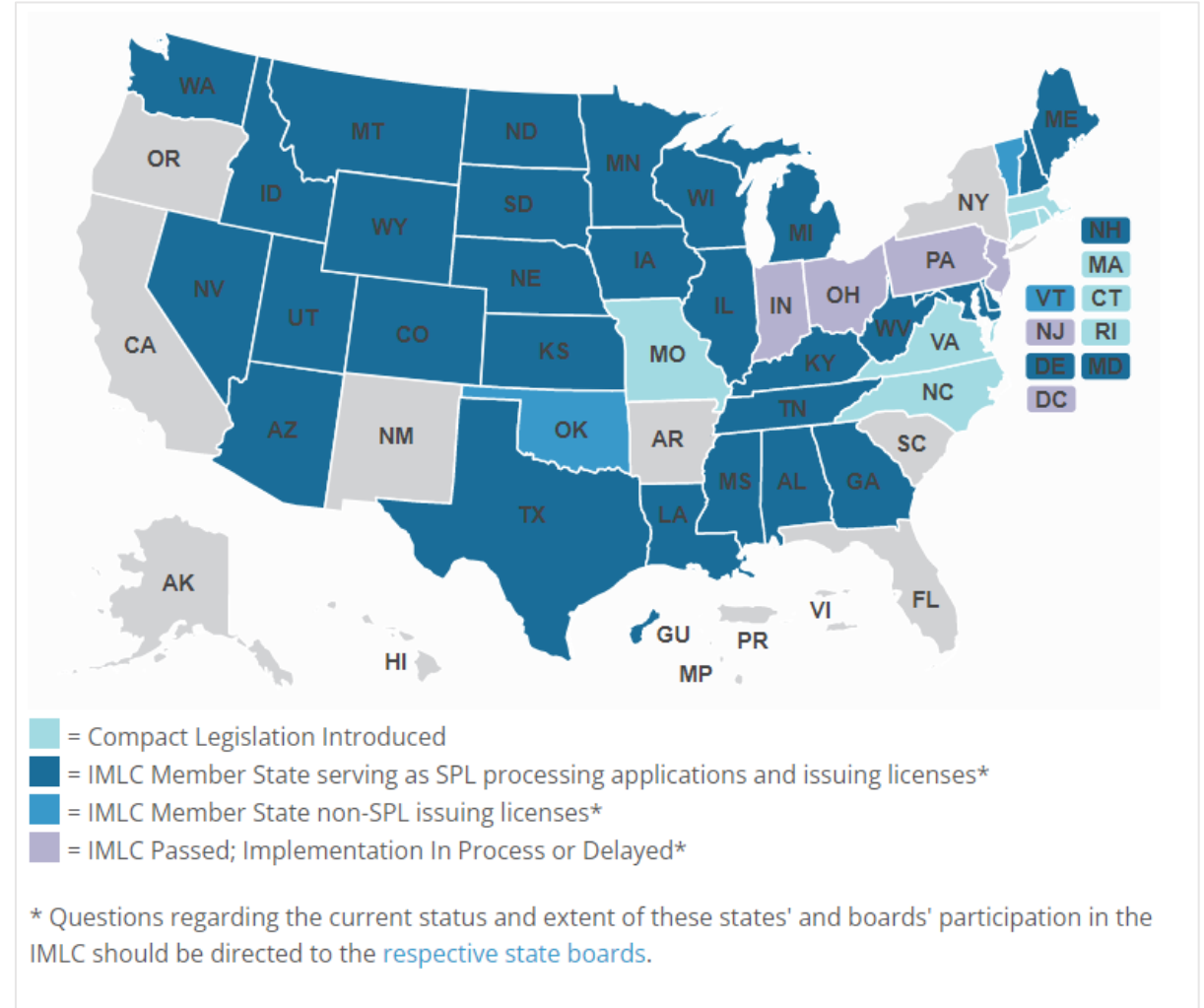
House passes telehealth rules extension through 2024

7/27/2022

- The House overwhelmingly passed legislation that would extend eased telehealth rules through the end of 2024.
- The 416-12 vote was a significant win for telehealth advocates. The bill would allow Medicare and federally qualified health centers and rural health clinics to continue covering telehealth visits from patients' homes and audio-only telehealth under Medicare.
- The measure would also extend a waiver permitting mental health patients to avoid having to go to in-person visits.
- [The legislation](#) now heads to the Senate. It's expected to have the votes to pass there as well but faces a packed legislative calendar. Lawmakers said that extending the flexibilities will allow Congress more time to consider permanent telehealth reform.

Regulatory Reminders: Licensure & Prescribing

- All states require NPs and PAs to hold licensure to provide care via telehealth.
- Supervising physicians' license is not adequate.
- A physician licensure compact exists, but NP and PA licensure compacts are lagging.
- Prescribing barriers related to controlled substances still exist for NPs and PAs.
- VUMC Compliance and Legal have engaged outside counsel for add'l guidance on prescribing controlled substances.



Physician Licensure Compact; Source: <https://www.imlcc.org/>

Telehealth Use Cases for Transplant Patients

- eConsults (physician to physician)
- New Patients
- Return Patients
- Global Period Visits
- Non-Billable/Bundled Visits: Social Work & Care Coordination
- Group Visits
- Research and Grants



Photo credit: apaservices.org



Reminder: after the PHE period, patients' transplant coverage – Medicare A vs. Medicare B – may determine which services can be offered via telehealth.

Demonstrating Telehealth Efficacy

NIH National Library of Medicine
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PMC PubMed Central® Search PMC Full-Text Archive

Journal List > Elsevier Public Health Emergency Collection > PMC7365092

Elsevier Public Health Emergency Collection
Public Health Emergency COVID-19 Initiative

Transplant Proc. 2020 Nov; 52(9): 2620–2625.
Published online 2020 Jul 16. doi: [10.1016/j.transproceed.2020.07.009](https://doi.org/10.1016/j.transproceed.2020.07.009)

Telemedicine in the Care of Kidney Transplant Recipients in 2019: Case Reports

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Abstract

Kidney transplant recipients who develop symptoms consistent with COVID-19 are bringing unique challenges to health care providers. This study reports on the experience of a transplant center in effort to maintain patient safety and reduce exposure to patients, health care workers, and the public. Here, we describe the experience of a transplant center in managing living kidney transplant recipients with COVID-19 who were managed using telehealth visits integrated with an electronic medical record system, fr

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Journal List > Nature Public Health Emergency Collection > PMC8597544

Nature Public Health Emergency Collection
Public Health Emergency COVID-19 Initiative

Curr Transplant Rep. 2021; 8(4): 257–262.
Published online 2021 Nov 17. doi: [10.1007/s40472-021-00339-w](https://doi.org/10.1007/s40472-021-00339-w)

Telehealth Use by Living Kidney Donor Transplant Program During the COVID-19 Pandemic and Beyond: a Practical Approach

Anju Yadav¹ and Pooja Singh¹

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Abstract

Purpose of Review
COVID-19 pandemic led to a decline in living kidney donor evaluation due to concerns for donor and recipient safety, restrictions on electronic health records, and resources in centers with a higher incidence of COVID-19 infections. We describe a strategy to continue living donor evaluations during the pandemic using telehealth visits. This approach includes restrictive physician licensing, reduced reimbursement, lack of infra

Global Perspectives

Kidney360

The Role of Telemedicine in Kidney Transplantation: Opportunities and Challenges

Beatrice P. Concepcion¹ and Rachel C. Forbes²

KIDNEY360 1: 420–423, 2020. doi: <https://doi.org/10.34067/KID.0000332020>

Introduction

Kidney transplantation is the treatment of choice for patients with advanced kidney disease who are medically and surgically fit to undergo the procedure and have reasonable life expectancy. It provides improved survival and quality of life for recipients and overall cost savings to the health care system (1,2). The process of undergoing kidney transplantation involves several phases of care including pretransplant referral and evaluation, waitlist management, and follow-up. In all phases of care, transplant centers interface with candidates and recipients who live across a wide geographic range, with many patients traveling significant distances to a transplant center (3).

In the United States, 41,077 candidates were added to the waiting list in 2019 and 23,401 received a transplant. There are approximately 220,000 prevalent kidney transplant recipients and 250 centers actively performing kidney transplants (4). With this continually growing patient population and a limited number of transplant providers, transplant centers are in need of innovative models of health care delivery that (1) allow them to reach and monitor candidates and recipients, particularly those that live far away; and (2) improve utilization of transplant center resources. Telemedicine, the practice of medicine using technology to deliver care at a distance, represents an opportunity to do both. The technology used may include telehealth videoconferencing (TVC), the internet, store-and-forward imaging, streaming media, and terrestrial and wireless communication (5).

Although telemedicine has been successfully used by numerous specialties, its utilization in the field of kidney transplantation has been lagging. Telemedicine has the potential to affect and improve the delivery of kidney transplant care through the following: (1) replacing or supplementing in-person visits with virtual visits through TVC, (2) electronic consultation, and (3) remote monitoring and provision of education through mobile technology (6). Here we focus on TVC and highlight opportunities for its use through the various phases of transplant care while discussing potential benefits (Figure 1) and barriers to successful implementation (Table 1).

video monitors, secure videoconferencing software, and a reliable internet connection. The intent of a TVC visit is to replace or supplement in-person visits, thus reducing the need for travel to the transplant center. In a TVC visit, the provider is typically located at a computer station in the office or clinic (provider site) while the patient connects to the visit through a computer station located in a local health facility (originating site). Alternatively, in specific scenarios, a patient at home can connect to the virtual visit through a mobile platform with videoconferencing software and capabilities. TVC is well suited for specialty care, including kidney transplantation, where patients require travel to centers to see subspecialists who are otherwise not available locally.

Pretransplant Care

After transplant referral, candidates must travel to a transplant center to undergo education and evaluation. Distance to a transplant center can pose as a barrier to access (3). Although candidates will ultimately need to be seen by transplant providers in person, TVC can improve access to care by serving as an initial screening visit. This may allow for improved timeliness to evaluation and significant cost savings for patients, as has been our experience at the Nashville Veterans Affairs (VA) Medical Center (7,8). TVC visits are well suited to assessing higher-risk candidates such as those who are older and have multiple comorbidities. We have found that TVC visits have been able to provide sufficient data to determine who is not a candidate for transplant. However, an in-person visit is required before approval. Although we have not conducted social work or education visits through TVC, these can potentially also be carried out.

Once on the waitlist, candidates can similarly be reevaluated through TVC in accordance with the center's protocol. This obviates the need for travel and time away from work, resulting in savings for candidates and their caregivers. Additionally, using TVC in the pretransplant phase may allow for increased referrals and the ability to enter the transplant referral

Programs Tout Telehealth as a Convenience

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Transplant Center

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Telehealth Services

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With this service, patients can receive care from the comfort of their home by using their phone, tablet, or computer. Our physicians have been trained in telehealth to ensure you receive the same quality care you expect from Emory.

or computer with a web camera to complete a one-on-one. These encounters protect patient privacy with the app compliant.

Appointment

UAB MEDICINE

UAB Medicine News

Kidney Transplant Recipients Save Time, Money Thanks to Telehealth

For more than 20 years, Sheri Faulk has had to take at least one day off of work, drive nearly 200 miles to Birmingham from Dothan and pay for a hotel room in order to spend a few hours with her transplant doctor at the **University of Alabama at Birmingham** — all to check in on the health of her transplanted kidney. Now, thanks to a new **telehealth** initiative, she only has to travel to the Pike County Health Department in Troy to see her doctor, Clifton Kew, M.D., the medical director of the **Kidney and Pancreas Transplant Program**, in Birmingham.



Clifton Kew, M.D., conducts an appointment from his office in Birmingham with Sheri Faulk, a kidney transplant recipient from Dothan.

Faulk, who was diagnosed with kidney disease while she was in college in 1991, has received two kidney transplants since. The first lasted only four years. In 1997, her sister was found to be a match and donated her kidney, which continues to work today.

"I've had to go back and forth to Birmingham since 1991 for treatments and appointments," Faulk said. "Knowing I don't have to make that trip anymore, but can still see my doctor, is amazing."

With the help of a nurse at the Pike County Health Department and videoconferencing, Faulk was able to meet with Kew "face to face." Kew listened to her heartbeat by using a Bluetooth-enabled stethoscope, discussed her vital signs and medications

RPM 101

DHHS defines remote patient monitoring as:

The ability to monitor certain aspects of a patient's health from their own home has become an increasingly popular telehealth option. Remote patient monitoring lets providers manage acute and chronic conditions. And it cuts down on patients' travel costs and infection risk.



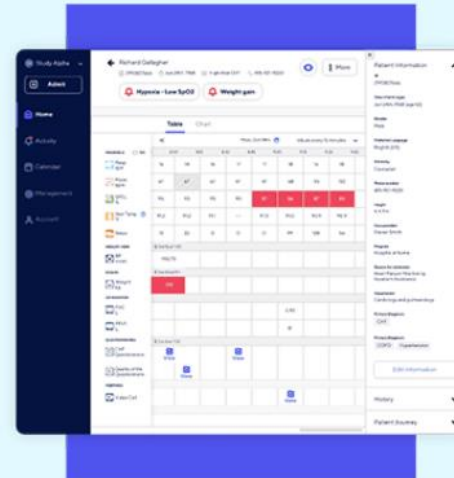
Patient Reported Data



Continuous Monitoring



Connected Devices



In-Home Services



Telehealth



Patient Engagement

RPM Reimbursement

Medicare uses the term, “remote physiologic monitoring” in its coding and billing language. Remote physiologic monitoring (RPM) is a set of codes that describes non-face-to-face monitoring and analysis of physiologic factors used to understand a patient’s health status.

CPT Codes

- 99453: Initial Set-Up
- 99454: Continued Monitoring Over 16-days
- 99091: Collecting and Analyzing Physiologic Data
- 99457: Management Services for Initial 20 Minutes
- 99458: Management Services for each Additional 20 Minutes

Commercial Reimbursement

Prior to COVID, commercial reimbursement for RPM was scarce; TN state legislative allows providers to negotiate RPM reimbursement rates with payors.

Thank you!