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Addressing Georgia's Type 2 Diabetes Challenge: An IHIT 2023 Report

Remote patient monitoring helps every stakeholder (patients, providers, and payers) win when it comes to type 2 diabetes

This 2023 IHIT Report aims to educate Georgia citizens and caregivers; community leaders and activists; healthcare providers and payers; and stakeholders and influencers on the potential value of expanding Remote Patient/Physiological Monitoring (RPM) for patients diagnosed with type 2 diabetes.

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Executive Summary

Almost one million Georgians – or one out of every 10 citizens in the state – suffer from type 2 diabetes, one of the most costly and devastating chronic diseases. Not only can diabetes be deadly, but it can also be expensive in terms of direct medical costs and indirect productivity loss ([CDC](#)).¹ Medical costs for people with diabetes are 2.3 times higher than people without diabetes, according to the American Diabetes Association ([ADA](#)).²

	Georgia	Nationally
Total diabetes cases	953,887	37.3M
Total population	10.6M	327M
Direct medical costs	\$7.8B	\$327B
Indirect costs	\$3.1B	\$90B

As referenced below, multiple studies show that remote monitoring tools combined with preventative care management can improve outcomes and patient quality of life while reducing costs. As remote monitoring solutions are adopted more widely across Georgia, several challenges are presented:

- Limited reimbursement
- Lack of awareness among physicians and patients
- Physician schedules and resources
- Patient co-pays
- Access to broadband

What is Diabetes?^{3,4}

Diabetes is a chronic health condition that results in elevated glucose in the blood because the pancreas either cannot produce insulin or the body is impaired in using insulin.

Type 1 Diabetes

occurs most often in children and adolescents. With type 1 diabetes, the body produces little to no insulin, and individuals require daily insulin injections. Type 1 diabetes is generally not considered preventable.

Type 2 Diabetes

typically occurs in adults and accounts for 90-95% of all cases. With type 2 diabetes, the body cannot effectively use the insulin it produces, resulting in high glucose levels that can cause significant physical damage. Type 2 diabetes is almost entirely preventable.

Gestational Diabetes

A third type of diabetes, gestational diabetes, occurs during pregnancy and is associated with complications for both mother and child. Although it usually abates after pregnancy, it can increase.



Georgia's Type 2 Diabetes Challenge

More than 37 million people in the U.S., including 953,887 Georgia citizens, suffer from diabetes (type 1 and type 2), one of the most costly and devastating chronic diseases.² People with diabetes are at a higher risk of serious health complications that not only impact their quality of life but also dramatically contribute to the state's rapidly rising healthcare costs, which represented \$5.2 billion or 20% of the state's general budget in 2021.⁵

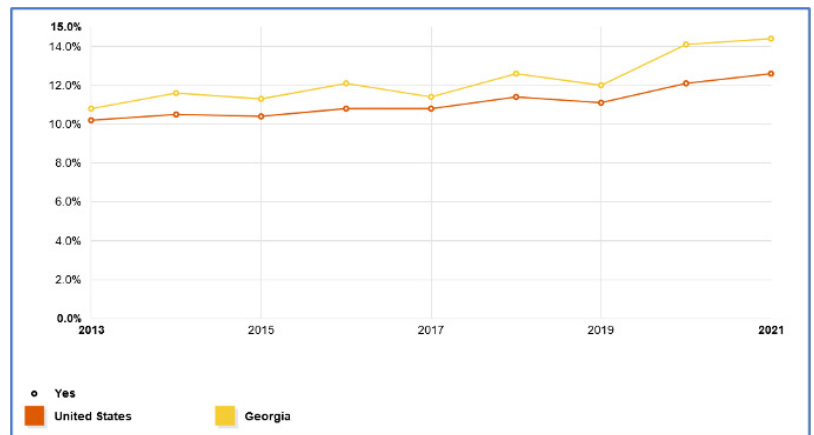
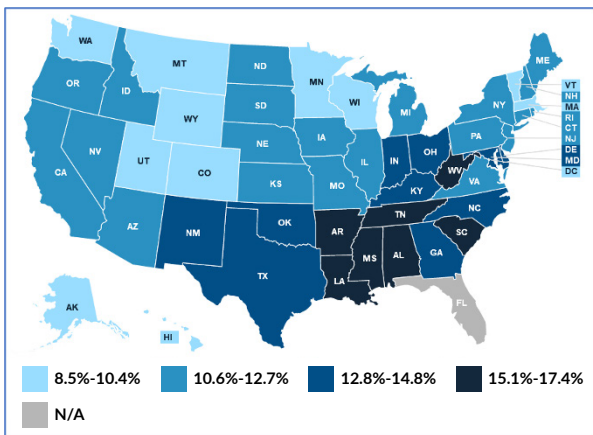


The cost of care for people with diabetes now accounts for ~1 in 4 healthcare dollars spent in the U.S.⁶

In addition to the almost one million Georgians diagnosed with diabetes, 234,000 people have diabetes and don't know it, substantially increasing their health risks. Plus, 2.67M adult Georgians (33.7% of the adult population) have prediabetes.²

Diabetes is prevalent throughout the Southeast, as seen in the chart below. According to the Kaiser Family Foundation, which looked at "adults who report ever being told by a doctor that they have diabetes," Georgia fares better than its neighbors. In Georgia, that number was 14.4% in 2021,⁷ and this rate is rising, as shown in the second chart below.

Adults Who Report Ever Being Told by a Doctor That They Have Diabetes



Source: Kaiser Family Foundation, 2021



Current Efforts to Mitigate Risks

Like other states, Georgia works with the Centers for Disease Control and Prevention (CDC) in offering Diabetes Self-Management Education and Support (DSMES) services, also called Diabetes Self-Management Training (DSMT). These educational programs endeavor to help people with diabetes use techniques to manage their blood glucose levels and medications better.

Studies have found that patients exposed to DSMES services showed lower cost patterns in comparison to a control group of people with diabetes who did not receive DSMES services. In fact, one study showed that people with diabetes who had at least one educational visit had a 34% lower hospitalization rate with a return on investment of \$4.34:1.45.⁸

A separate three-year retrospective claims analysis of four million covered lives (including 250,000 Medicare beneficiaries), showed that Medicare beneficiaries who completed a DSMES service had an average cost savings of \$135 per month.⁸

However, according to the Georgia Department of Public Health,⁹ the number of DSMES service providers in Georgia is insufficient to serve the number of people with diabetes and prediabetes in the state.

The CDC reports that there are 65 recognized/accredited DSMES service providers in Georgia, but only 21.7K people have had at least one encounter with a DSMES service provider. That's just 2.3% of all Georgians with diabetes.¹⁰

Emerging Solutions: Leveraging Technology to Reduce Risk, Improve Health

Even as DSMES programs struggle to reach patients and find staff in underserved and rural areas, new technology has made it possible for providers to monitor patient health more closely and intervene prior to adverse events.

It is called Remote Patient/Physiological Monitoring (RPM), and it leverages modern technology that allows providers to remotely capture data, such as vital signs, weight, blood pressure, and blood sugar values, inbetween visits. This information can help physicians better manage acute and chronic conditions while also engaging the patient in their own care.

Many different RPM devices capture and record patient health data outside the physician's office. Some automatically push data to the physician systems, while others require manual data entry by patients. Once the data is received, clinical resources analyze the data for any significant changes in the patient's numbers. If necessary, the clinician can proactively reach out to the patient to intervene before costly complications occur.



RPM Reimbursement Status in Georgia

Reimbursement for RPM is a critical element of adoption and implementation. Not only is there a cost for the technology and devices, but an RPM program requires staff time and effort to implement and onboard patients, analyze the incoming data, and coordinate the appropriate steps that should be taken with patients.



With limited resources available and inconsistent or nonexistent reimbursements, many physicians are unable to offer RPM services to their patients.

Medicare

reimbursement policies have allowed and even encouraged physicians to deliver RPM services to their patients by consistently expanding the number of ICD-10 codes and increasing reimbursement amounts, thereby providing the funding and resources necessary to support these preventative care services.

Commercial Payers

have followed Medicare's guidance and reimbursed providers for these services.

Medicaid

payers in Georgia do not currently reimburse providers for these services, leaving many of the state's most vulnerable citizens on their own to manage their diabetes. Approximately 2 million Georgians, or 20% of the state's population, are Medicaid beneficiaries.¹¹

Currently, there is no separate reimbursement for RPM services to Federally Qualified Health Centers (FQHCs) and Rural Health Clinics (RHCs) that are typically considered "safety net" systems. There are 35 FQHCs and 92 RHCs in Georgia, providing care for more than 650,000 Georgia citizens.¹² The good news is that in the recently proposed CY 2024 Physician Fee Schedule, CMS is considering expanding reimbursement for RPM to FQHCs and RHCs.¹³ This could positively impact the hundreds of thousands of Georgians these organizations serve.



Barriers to Statewide Adoption of RPM

Several barriers must be overcome to drive more widespread adoption of RPM among patients and providers.

Awareness

Both caregivers and patients need to be made aware of RPM technology and its potential benefits. Patients need to understand how providing caregivers with real-time insights into their health status can allow for timely interventions before any deterioration reaches a critical stage, rather than seeing their provider quarterly and retroactively reviewing their health status. While many caregivers are familiar with the concept, they need to fully understand the potential benefits and resources available to support the administration of an RPM program.

Co-pays

Because certain insurance programs require a monthly co-pay, patients may be reluctant to participate in RPM. Medicare patients typically pay 20% of the total Medicare reimbursement paid to the provider, which equates to a \$20-30 monthly patient financial obligation.

Broadband Access

Another barrier to patient adoption of RPM is limited access to high-speed broadband internet. According to the organization BroadbandNow, Georgia ranks 18th among states in terms of internet coverage, speed, and availability. As you might expect, rural communities are disproportionately impacted by the lack of service.¹⁴ Under Governor Brian Kemp, the state has invested nearly \$1B in expanding broadband access, but more investment is still needed to equalize services statewide.

Reimbursement

Without consistent reimbursement standards across the state for RPM devices and services, many physicians are unable to pursue RPM-enabled programs. In fact, IHIT research specialists spoke with several rural healthcare providers about RPM. Most physicians reported being relatively familiar with the value RPM could bring to their patients and their practice. Still, the primary reason cited for not offering these services to their patients was lack of reimbursement.

Resource Constraints

In addition, as stated previously, many physicians lack the resources, staff, time, and capacity to implement and operate RPM programs successfully and effectively. The lack of reimbursement for these services impedes the physician practice's ability to manage RPM programs while also juggling a host of other regulatory and reimbursement issues that are constantly evolving.

“A large percentage of our patients are on one of the state’s Medicaid programs. The time and resources it would take for us to implement RPM with our patients is not covered by Medicaid, and therefore, we are unable to afford to implement a program that would help us better manage our diabetic population.”

– Rural Georgia Healthcare Provider



Evidence of the Positive Impact of RPM

A published October 2021 research study out of the St. Joseph's/Candler Health System in Savannah, Georgia, shows that people with diabetes who received care via RPM and telehealth during the pandemic saw their A1C levels drop, with 2 percent and 2.2 percent reductions at three and six months, respectively.¹⁵



What is A1C? A1C stands for Hemoglobin A1C test, and the letters A1C stand for the type of hemoglobin A associated with diabetes.

“Remote patient monitoring programs, technologies, and protocols are becoming increasingly popular, backed by growing clinical evidence and a slew of non-clinical benefits.”

– [mHealth Intelligence](#), February 2022, RPM 101: What Is Remote Patient Monitoring, Its Benefits, and Uses?”

The researchers also sought to determine if telehealth influenced the percentage of patients on statin therapy and how telehealth affected quality measures relating to Healthcare Effectiveness Data and Information Set (HEDIS) and Merit-Based Incentive Payment System (MIPS) goals.

Using telehealth and RPM for type 2 diabetes treatment improved factors that HEDIS and MIPS measure for performance quality. In the pre-telehealth group, 41.7% of patients had their A1C levels under control, according to HEDIS standards. 54% of patients met that goal. In the telehealth group, the researchers noted that 73.8% of patients met the MIPS standard of having an A1C of less than 9%, compared to the 60% of patients in the pre-telehealth group.

Researchers also found that RPM reduced the number of in-person visits and improved patient health outcomes. The study reported that patients found the virtual care platform to be timely and convenient.

When we look across the Southeast for evidence of RPM success, we find [Ochsner Health](#), a 47-hospital health system based in Louisiana. An early adopter of RPM, Ochsner started remotely monitoring patients with hypertension in 2015 and added diabetes management in 2017 to their Ochsner Digital Medicine Program. Since that time:

- 81% of members have reached their A1C goal after six months in the program
- 30% decrease in emergency room visits among type 2 diabetes participants
- 15% decrease in hospital admissions among type 2 diabetes participants¹⁵



In June 2022, Ochsner launched a digital health pilot program for Medicaid patients with hypertension and type 2 diabetes.¹⁶ Several months later, Ochsner announced the results, which showed that remote patient monitoring combined with personalized care teams effectively brought down patients' blood pressure and hemoglobin A1C levels. The Medicaid patients with hypertension received a blood pressure cuff, with diabetic patients receiving monitoring supplies, such as continuous glucose monitors.

Ochsner Health stated in a press release, "The statistically and clinically significant results of the pilot program – one of the first in the country – showed that enrollment in Ochsner Digital Medicine brought nearly half of all out-of-control hypertension patients under control at only 90 days, which was 23% more likely than usual care. Control rates continued to improve as patients remained in the program during its first 18 months. More impressively, 59% of people with poorly-controlled diabetes achieved control over their condition as part of the digital program – a rate twice as high as usual care."

Not only did health outcomes improve, but patient satisfaction also improved, with a net promoter score of 91 among participating Medicaid beneficiaries. This is consistent with the high patient satisfaction with digital chronic disease management programs at Ochsner among non-Medicaid patients.

This research indicates that broad implementation of RPM throughout Georgia would be a win for everyone.

Snapshot of Ochsner RPM Success

81%
of study participants reached their A1C goal

30%
decrease in ER visits

\$163
/member/month savings

Patients

Diabetic patients who remain actively engaged with their physician and regularly report data to their practice are more likely to have fewer costly complications and hospital visits, and they are more likely to live healthier, happier, and more productive lives.

Providers

For hospitals and physician practices, RPM holds the promise of higher quality care and better health outcomes for patients, which ultimately impacts their quality scores and reimbursement rates. Plus, with fewer highly complex cases, staff members can focus on providing more personalized care for each patient.

The State

By more closely monitoring and engaging with members diagnosed with type 2 diabetes, all payors, including Medicaid, can help members avoid adverse events, slow disease progression, improve outcomes, and reduce the risk of developing co-morbidities and other costly complications, such as amputations. This reduces the healthcare costs the state incurs and improves the lives of Georgia's citizens.



The Time to Act is Now

The benefits of RPM for people with type 2 diabetes are well-proven. Still, the need for provider reimbursement and financial support for patients creates a chasm between the availability of RPM services and those most in need. While new state and federal broadband initiatives are helping to close the gap between urban and rural populations, the obstacles to education, availability, and affordability remain.

The double whammy of increasing diabetes prevalence and care costs will not abate. There are four steps leaders in Georgia can take to improve the health of its citizens diagnosed with type 2 diabetes while reducing the financial burden this disease imposes on the state:

- Support reimbursement for RPM in safety net programs (FQHCs and RHCs)
- Fund the expansion of RPM pilots and programs, especially among low-income and socially disadvantaged individuals
- Establish education and outreach to providers and patients through existing state agencies
- Create a fund to help with patient co-pays for those who qualify financially for aid

About the Institute of Healthcare Information Technology

Institute for Healthcare IT (IHIT) is a non-profit organization focused on fostering economic development opportunities and improving the accessibility and quality of healthcare in Georgia through the advancement of technology. Over the years, IHIT has sponsored multiple reports, including the Voice of Georgia's Digital Health Ecosystem, the State of Cybersecurity Among Georgia Hospitals, and Georgia Healthcare IT Workforce Needs.

Sources Footnote:

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To learn more about how you can contribute ideas and resources to build a more robust digital healthcare ecosystem in Georgia, visit instituteforhealthcareIT.org.



Georgia Companies Enabling RPM

Among the Georgia companies providing RPM services are:

[ChronicCareIQ \(Roswell\)](#): ChronicCareIQ builds and implements software solutions and mobile applications that enable physicians to stay better connected to their chronically ill patients so they can improve patient outcomes.

[Corstrata \(Savannah\)](#): Corstrata offers patients virtual access to board-certified wound care, ostomy, continence nurses (WOCNs), and wound management programs. With foot ulcers being one of the most common and costly complications for patients with diabetes, Corstrata's Diabetic Foot Ulcer and Amputation Prevention service is designed to actively care, manage, and engage members at risk of developing DFU for compliance with remote temperature monitoring and for timely, evidence-based interventions to prevent ulcerations as well as reduce unnecessary diabetes prevention program with remote monitoring.

[Diasyst \(Atlanta\)](#): Diasyst's unique medication intelligence approach to chronic disease management empowers healthcare providers to make timely, quick, safe, and effective treatment decisions. Backed by decades of research at Emory University and the VA, Diasyst gathers, computerizes, and maintains an ever-expanding knowledge base of thousands of pages of clinical guidelines, drug labels, research studies, and best practices making up its clinical decision support. Through its proprietary AI, Diasyst delivers treatment recommendations to care teams and decision-makers, helping save time, increase revenues, and maximize patient outcomes. Diasyst's medication intelligence solution has been commercialized as RxINTEL and is marketed to the entire RPM solutions market.

[Rimidi \(Atlanta\)](#): Rimidi's Remote Patient Monitoring solution for diabetes combines patient-generated health data from connected glucometers and CGMs with clinical data in the EHR to drive patient-specific insights and clinical actions.



Appendix: Appreciation to Our Contributors

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