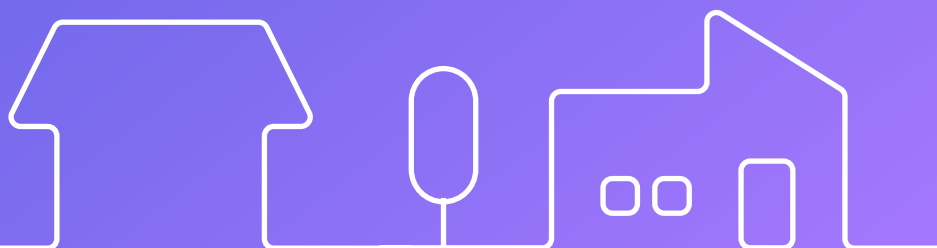
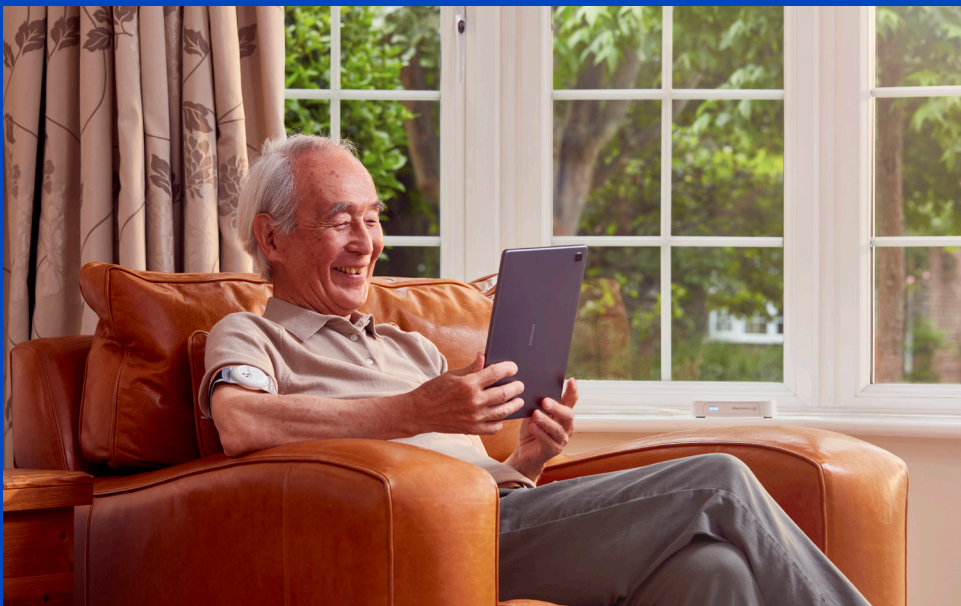


Case study

How Geisinger Transformed Hypertension Care

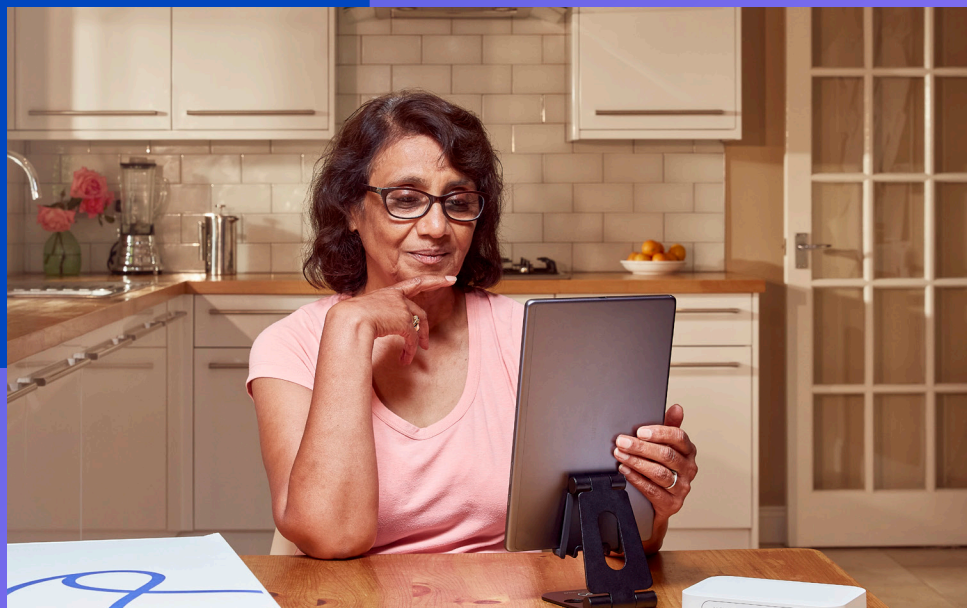
with Remote Patient Monitoring and Pharmacist Support



Introduction

In recent years, the integration of remote patient monitoring (RPM) and pharmacist interventions has shown promising results in managing hard-to-control blood pressure. This case study explores how Geisinger leveraged Best Buy Health's RPM platform to improve blood pressure control among patients with treatment-resistant hypertension.

Geisinger



Background

Geisinger, based in Danville, Pennsylvania, is a renowned healthcare organization known for its innovative approaches to patient care.

With a strong focus on integrating technology into healthcare, Geisinger has been at the forefront of implementing RPM solutions to enhance patient outcomes and has been leveraging Best Buy Health's care-at-home solution, Current Health, since 2020.



Images courtesy of Geisinger.

1.5M

Geisinger serves **more than 1.5 million patients** across Pennsylvania.

13

Operates **13 hospital campuses**, two research centers, and a medical school.

600K

Administers a health plan with over **600,000 members**.

Challenge

Managing treatment-resistant hypertension is a significant challenge in healthcare. Nearly half of adults in the United States have high blood pressure, defined as a systolic blood pressure greater than 130 mm Hg or a diastolic blood pressure greater than 80 mm Hg, or are taking medication for high blood pressure¹.

This condition is a major risk factor for heart disease and stroke, which are leading causes of death in the United States. In 2022, high blood pressure was a primary or contributing cause of 685,875 deaths in the United States¹. The economic burden is substantial, with annual costs associated with high blood pressure estimated at \$219 billion in 2019².

Traditional in-clinic visits often fall short in providing the continuous monitoring and timely interventions needed for patients with blood pressure levels consistently above 140/90 mm Hg, despite being on multiple antihypertensive medications.



“We know that home blood pressure monitoring can be done by patients accurately and can really help engage patients in their own health. However, we also know that these self-measured blood pressure readings often do not make it back to patients’ health care team, therefore, delays in adjusting medications are very common. This type of physician-pharmacist collaborative model with home blood pressure monitoring that is centrally received and monitored by the care team can help address these issues.”



Alexander Chang, MD, M.S., nephrologist and Associate Professor in the Department of Nephrology and the Department of Population Health Sciences at Geisinger

Solution

To address this challenge, Geisinger turned to their ConnectedCare365 program, a robust in-house entity managing care-at-home for patients across the system.

The Current Health platform provided RPM, and patients received Bluetooth-enabled blood pressure monitors and other devices that transmit data to healthcare providers in real-time. Pharmacists played a crucial role in this model, co-managing patient care through telehealth consultations, making medication adjustments, and addressing medication adherence issues.

During the program’s first six months, home blood pressure monitoring devices transmitted notifications to doctors via Bluetooth through an app.



Study details

205 | Adults included in study

62 | Average age

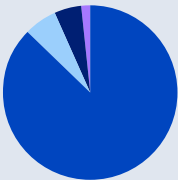
48% | Self-identified as women

52% | Self-identified as men

53% | Diagnosed with chronic kidney disease when enrolled

Self-identified for race/ethnicity

- 87% Non-Hispanic White
- 6% Black
- 5% Hispanic
- 1.5% “Other”



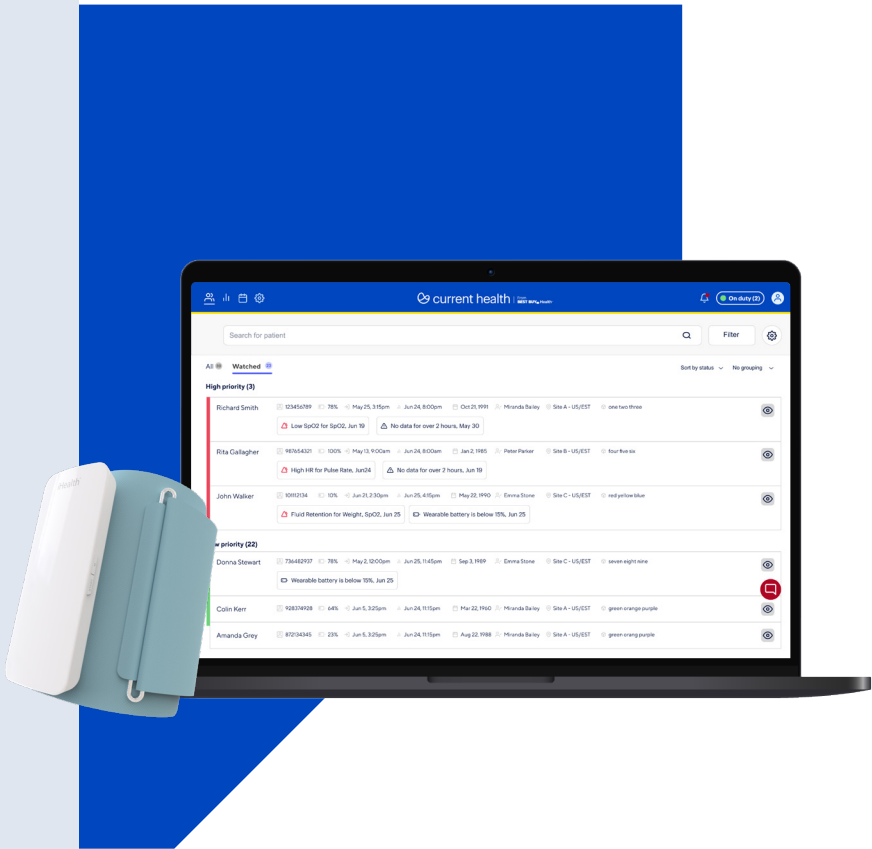
Participants’ blood pressure was tracked for up to 6-12 months between March 2022 and May 2024 with consistent improvements even after participation in the study ended.

Solution

During the second six months, the notifications were transmitted first to pharmacists through the Current Health app, and pharmacists co-managed blood pressure through a collaborative telehealth practice agreement. While patients were enrolled in the program, they also had real-time access to a nurse during business hours through a live chat feature in the Current Health app.

These devices connected to patients’ phones via Bluetooth through the Current Health app. Blood pressure measurements were assessed, and blood pressure medications were prescribed and/or adjusted accordingly by pharmacists or nephrologists.

The ConnectedCare365 program incorporated these key elements by providing patients with the tools and support needed to manage their condition effectively. The Current Health platform enabled regular monitoring, allowing healthcare providers to track patients’ blood pressure trends and intervene promptly when necessary. By delivering timely reminders and educational content, the platform encouraged patients to adhere to their care plans, fostering consistent engagement with their health management. Pharmacists provided personalized care, helping patients adhere to their medication regimens and make lifestyle changes to improve their blood pressure control.



Research suggests that successful hypertension management involves a combination of medication adherence, lifestyle changes, and continuous monitoring².

The American Heart Association emphasizes the importance of using medications as prescribed, making lifestyle changes such as dietary adjustments and regular physical activity, and monitoring blood pressure regularly to track progress and make necessary adjustments².

Results

The program yielded impressive results. Hypertension control improved, hospitalizations decreased, and the Current Health platform allowed for timely interventions, enabling improved patient outcomes.

74% Blood pressure control at 12 months

By six months, 67% of patients achieved blood pressure control below 140/90 mm Hg. At 12 months, this success rate improved to 74%.

These results exceeded the 2017 clinical guidelines from the American Heart Association and the American College of Cardiology, which define stage 2 hypertension at 140/90 mm Hg.

More pharmacist telehealth interactions lowers blood pressure

Pharmacist telehealth encounters, in which the patients talked directly with pharmacists about hypertension management, were documented in **65% of patients**, and pharmacist interactions were associated with a **1.3 mm Hg/month decline** in systolic blood pressure over time.

Medication management

During the 12-month study period, **46% of patients** had a blood pressure medication adjustment, and 37% were prescribed new blood pressure medication.



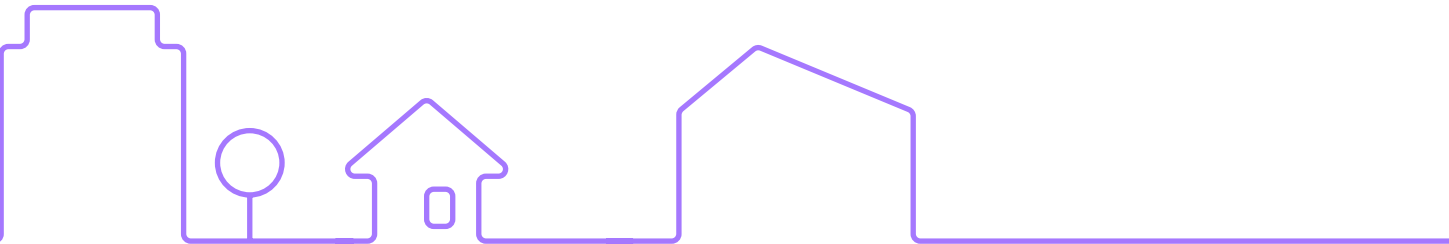
3.3 mm Hg/Month reduction in severe hypertension

For patients with initial blood pressure readings above 150/90 mm Hg, systolic blood pressure decreased by an average of 3.3 mm Hg/month. Patients with initial readings of 140–149/90–99 mm Hg experienced a decrease of 2.4 mm Hg/month. For patients with readings below 140/90 mm Hg, the reduction was 0.6 mm Hg/month.

The most significant reductions were observed in patients with the highest initial blood pressure, demonstrating the solution’s effectiveness in managing severe hypertension.

Fewer hospitalizations

Patients experienced **fewer hospitalizations** during the study period compared to the previous 12 months; however, there was no difference in the number of reported emergency department visits.



Conclusion

Remote patient monitoring and pharmacist collaboration yielded significant results for treatment-resistant hypertension.

The integration of Best Buy Health's RPM solution and pharmacist-led interventions demonstrated a highly effective approach to managing treatment-resistant hypertension. This solution enabled real-time monitoring of patient data and personalized, proactive care, allowing pharmacists to adjust treatments based on continuous feedback.

By leveraging the synergy between technology and clinical expertise, this approach not only improved blood pressure control in patients with difficult-to-treat hypertension but also showcased the broader potential of technology-driven healthcare solutions to enhance patient outcomes, streamline care delivery, and reduce overall healthcare costs.



Enabling Better Hypertension Management with Best Buy Health

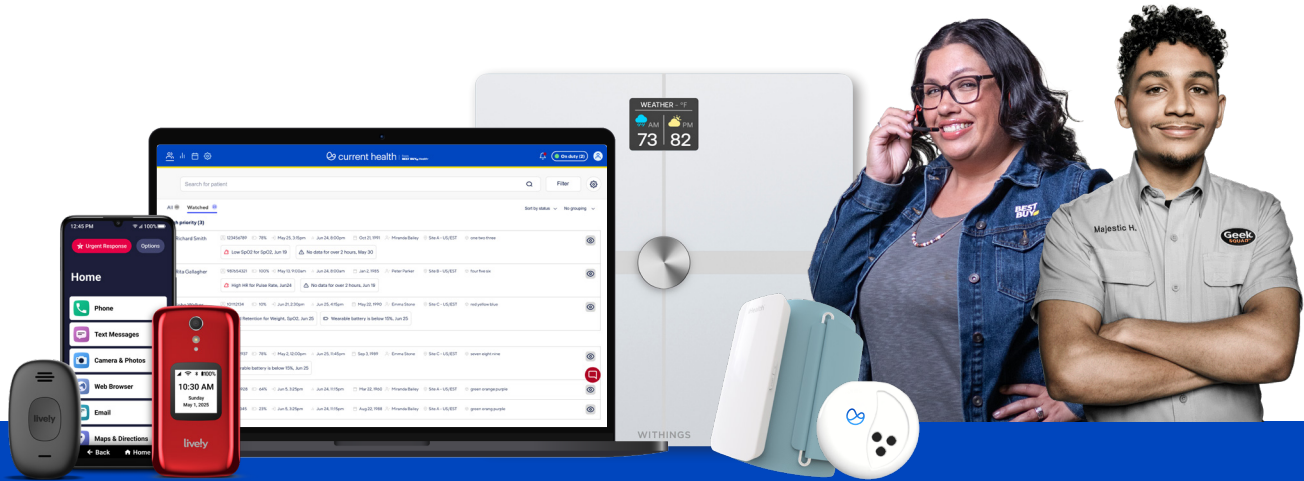
Best Buy Health's care-at-home solution combines configurable technology and services to help healthcare partners effectively scale care at home.

Seamlessly integrating into both patients' lives and health system workflows, Best Buy Health leverages remote patient monitoring technology, real-time data insights, and comprehensive support services to drive improved health outcomes.

The platform connects continuous wearable and intermittent devices to an intuitive dashboard, empowering healthcare providers to monitor vital

signs, detect trends in real time, and intervene proactively. Patients benefit from integrated clinical tools and services, gaining guidance to adhere to care plans, make meaningful lifestyle changes, and achieve better health outcomes. Best Buy Health's support extends beyond technology, offering end-to-end logistics through Geek Squad and expert implementation through dedicated professional services.

Transform care delivery with Best Buy Health — because every patient deserves proactive, personalized support.



References

¹ How to Manage High Blood Pressure — American Heart Association

² <https://www.advisory.com/content/dam/advisory/en/public/shared/Research/PHA/Resources/2019/Care-delivery-innovation/Hypertension-ManagementReference-Guide-20PDFFinal.pdf>



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bring health home.

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