CASE STUDY

Delaware Valley Community Health Leverages RPM to Support Community-Wide Hypertension Initiative

THE CHALLENGE

Control hypertension outside a traditional clinical setting

To complement the ability to deliver telehealth services during the height of the pandemic and recognize that important clinical data points such as blood pressure would not be received in the virtual visit, DVCH looked at ways to support their patient population during this time. Additionally, because of a strong data and health equity mindset, the organization wanted to strategically deploy a way to tackle a disparity noted in Southeastern Pennsylvania's African-American community. DVCH launched a community health outreach program to showcase their centers' interdisciplinary teams—Road to Controlled Hypertension. The goal is to increase provider and staff engagement and implement evidence-based practices that include advanced self-measured blood pressure technology to increase controlled hypertension rates within their patient population.

Objectives:

- Offer enrollment to ~4k patients by the end of 2023
- Improve UDS hypertension metric control scores from 46% (2021) to 80% or higher by the end of 2023
- Improve African American population hypertension control rate when compared to the DVCH overall aggregate to decrease disparities

A major component of this HRSA-funded outreach was the Self-Measured Blood Pressure (SMBP) program, a combined home and team-based care approach. Patients become enrolled in the program via outreach from care coordination teams, or through warm hand off from providers via the visit.

The warm hand off can occur from a virtual visit or an in-person visit. The care team worked with the patient to determine best time for enrollment, empowering the patient from the beginning of the process by involving them in the decisions made. Real-time data generated by blood pressure monitoring devices given to patients enrolled in SMBP provides care teams with accurate and timely information to ensure the best treatments.

CLIENT PROFILE

Delaware Valley Community Health, Inc.

Locations: Nine Federally Qualified Health Centers (FQHCs) in Southeastern Pennsylvania

Services: Adult internal medicine, optometry, behavioral health, pediatrics, women's health, OB-GYN, podiatry, dental, and medication-assisted treatment (MAT)

Mission: For more than 50 years, Delaware Valley Community Health (DVCH) has delivered affordable and accessible care to uninsured and underinsured patients.

NEXTGEN HEALTHCARE SOLUTION

- NextGen® Remote Patient Monitoring *powered by Validic*
- NextGen Virtual Visits™

HIGHLIGHTS

Exceeded the 2022 EOY goal of 48% controlled hypertension metric goal (reached 55.3% by June 2022)

Outreached to 1,193 patients by June 2022 (Aim to reach 1,440 by EOY 2022 and 3,939 by EOY 2023)

Currently have 358 patients enrolled in the SMBP program and have **graduated 244 patients** as of September 2022

Addressed Social Determinants of Health challenges

Provided doctors and nurses with more actionable patient data

THE STRATEGY

The care team leveraged remote patient monitoring (RPM) to ensure the all efforts of the program were seen and addressed through equity lenses. SMBP presented an opportunity to lower digital divides and close gaps related to health literacy—real barriers to equitable care.

The program involved three steps:

Enrollment

- Install mobile app on patient's device
- Sanos tablets were available to patients who did not have a device
- In-app enrollment, where the care coordination team and patients look at screen together in the office

Accountability

- Real-time data feeds allow care coordination to view and track device data
- Patient and care coordination see the same data
- Troubleshoot any issues

Goal Setting/Management

- Patients can view goals set by patients with pharmacists and providers' input
- Primary goal: patients monitor blood pressure twice daily

THE SOLUTION

User-friendly RPM for patients and care teams

DVCH selected NextGen Remote Patient Monitoring powered by Validic because of its interoperability between the EHR, virtual visits and the features of the Validic real-time device data display. An in-app enrollment process made it easier for patients to synch their devices to the mobile app. The care team worked closely with patients as they enrolled. Sharing screens and looking at the real-time data display together ensured everything worked properly before sending the patient home.

In helping patients enroll in the SMBP program, staff found the RPM devices' Bluetooth cuffs connected easily with the patients' Apple or Android phones, as well as with the real-time display.

"In addition to setting up the patients' RPM, we enabled them to view goals set by the care coordination team and their providers," said Kimberly Allen, MSN RN CPHQ, FACHE, chief quality & innovation officer at Delaware Valley Community Health. " We wanted this to be easy for the patient and didn't want to overcomplicate it."

SMBP in action: patient care overview

DVCH's care coordination team, led by Janine Gibbons consists of CHWs, nurses, care navigators, and other staff. They work with our clinical pharmacy team and providers to help each patient take control of their blood pressure. This timeline shows a patient's journey and how RPM helps the team.

"The team at DVCH exemplifies the true meaning of interdisciplinary care. The teams that do this work each day at DVCH are healthcare professionals applying synergies to improve population health while empowering the patient to be an active participant in their care. The use of RPM is not one innovation, this is an expression of our organization's priorities realized through the creative action of our teams."

Kimberly Allen, MSN RN CPHQ FACHE
Chief Quality & Innovation Officer
Delaware Valley Community Health

1/31/22: middle-aged woman's case of hypertension:

Hypertension risk factors include African American race, depression, family history of HTN, gout, CAD, and an inactive lifestyle. Associated symptoms include headache. Pertinent negatives include chest pain, confusion, diaphoresis, dyspnea, irregular heartbeat/palpitations, nausea, transient weakness, visual disturbances, and vomiting.

Additional information: blood pressure has been high at home—was 189/117 this morning (wrist cuff). Patient with a history of severe migraines; no change. No tobacco use.

Active HTN Medications:

Propranolol 10mg BID monotherapy, started 5/16/2018

Assessment/Plan:

Essential (primary) hypertension:

- Uncontrolled—home and office readings high. Stop propranolol and start lisinopril 10 mg daily. Encouraged patient to continue taking blood pressure at home and to keep a log. Discussed low-salt and low-fat diet; encouraged regular exercise, and referred to enroll in the SMBP program:
- 1/31/22: Presented with uncontrolled blood pressure (172/108) switched to Lisinopril 10 mg
- Stopped Propranolol 10 mg BID monotherapy started 5/16/2018
- 2/7/22: Patient calls into the dispensary concerned with high blood pressure readings at home (175/115, 190/120). Set up for same-day telehealth provider appointment
- Provider increases Lisinopril to 20 mg and refers to the SMBP program
- 2/14/22: Care coordinator provides patient with blood pressure monitor and connects it via Bluetooth to the patient's phone
- 2/23/22: Care coordinator receives readings presented as hypertensive crisis (avg 179/119, highest reading 199/105) and contacts patient
- HCTZ 12.5 mg added to regimen
- 3/11/22: Care Coordinator recommends patient graduate from SMBP with weekly avg of 129/77
- Pharmacist recommendation: Approves recommendation to graduate. Switch patient to lisinopril/hctz combo pill to assist with adherence

"The RPM system enables our interdisciplinary team to maintain a patient-centered care approach, which is the hallmark of an FQHC."

Kimberly Allen, MSN RN CPHQ FACHE
Chief Quality & Innovation Officer
Delaware Valley Community Health

THE RESULTS

Steady increase in patients with controlled hypertension

In an effort to recover data points lost during the height of COVID and also work to improve a noted disparity in the African American population, DVCH set a goal to reach 3,939 patients and offer enrollment by the end of 2023. By June 2022 DVCH has exceed the EOY goal of 48% as measured by the UDS hypertension metric, and they are on target to have double digit gains exceeding 55% as the 2022 data year ends. This year the clinic has outreached to 1,193 patients and aims to complete the 2022 year-end goal of 1,440 patients. Currently, 358 patients are enrolled, and 244 patients have graduated from the SMBP program.

RPM and virtual care expand the window into a patient's health

"During the COVID-19 pandemic, DVCH saw a higher portion of their patients through virtual visits," said Allen. "This opened the way to obtain their health information when we're not seeing them in the office."

An RPM system or a cuff helps patients, particularly those with transportation issues, to interact with their providers and make treatment adjustments based on the patient's real-time health data. While reviewing the data with the patient during a virtual visit, the provider can pick up on any noticeable health concerns in the patient's home environment.

"With information from a patient's monitoring device, nurses can detect any trends the patient is encountering, reach out to them, and loop in providers to make critical decisions in the moment," said Allen. They can meet patients' health needs proactively instead of waiting to get them into the clinic for an appointment."

How RPM can support better nutrition

DVCH partners with Food Trust, a nonprofit dedicated to ensuring everyone has access to affordable, nutritious food, and to educating patients about diet and exercise. In addition to the education, patients in the SMBP program receive "Food Bucks" to get fresh produce that would otherwise be too expensive or not accessible.

"We not only address transportation issues, a key factor in the Social Determinants of Health, we also resolve food insecurity and pair these efforts with wellness education through our health educators," said Allen. This is value -based care in motion and the DVCH team continues to look for actionable changes that complement our RPM system.

More actionable data helps drive better outcomes

With data from RPM, providers have told Allen they have more actionable information to complement recommendations for better diet and education. More real-time data from the patient also helps the clinical pharmacy staff with medication dosing and adherence. Providers and pharmacists maximize the continuous flow of health information directly from patients to control their hypertension.

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HOW CAN WE HELP?

Partner with us at **855-510-6398** or **results@nextgen.com**