



## **A Population Health-Based Approach in Managing Hypertension**

## Abstract

Hypertension confers significant cardiovascular disease and disability worldwide. Hypertension control remains a largely unmet challenge for health systems. Despite the progress in home blood pressure (BP) measurement technology and the availability of safe and effective medications, a large proportion of hypertensive patients are not identified. In addition, a significant proportion of those who receive antihypertensive treatment fail to achieve adequate control of their BP levels.



The number of adult patients in the United States who have hypertension based on the ACC/AHA 2017 guideline is a staggering 47.3% or 116 million.

## Case Study

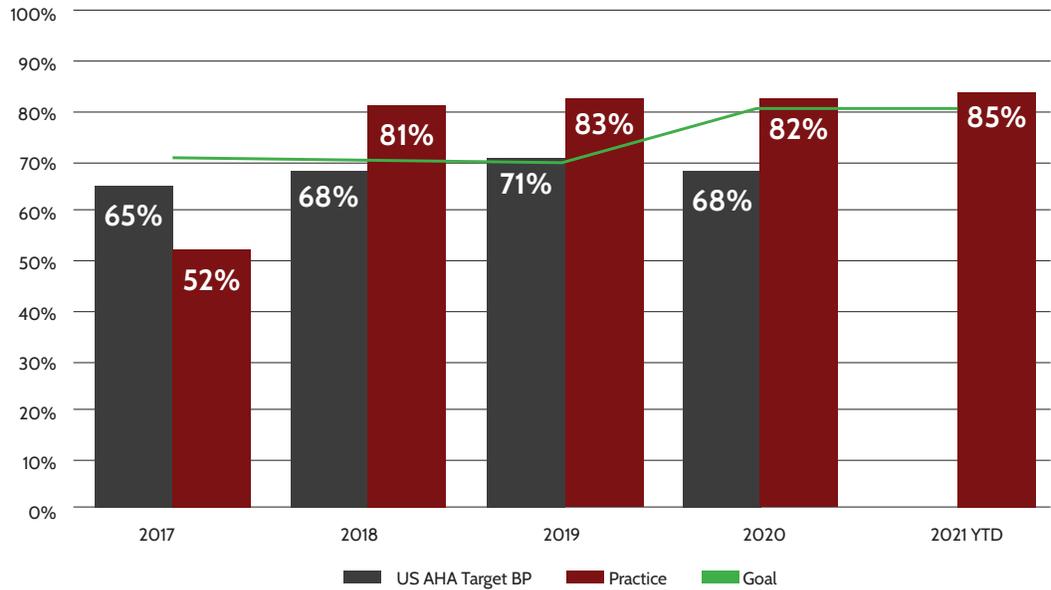
In 2017, a large single-specialty cardiology practice set a goal to actively monitor and manage blood pressure based on ACC/AHA 2017 guidelines. Their Clinical Quality Committee in collaboration with Medical Practice Committee formulated a policy to identify patients with hypertension and developed a protocol for documentation and workflows for the subsequent management of these patients. The clinical team was educated and trained on techniques to consistently and accurately obtain blood pressure readings and calibrate the BP monitoring equipment.

A population health analytics platform was implemented in 2018 to support the HTN management program. This platform has enabled the practice to scale the program and intervene at an individual patient level with high accuracy and efficiency.

The practice set a target to ensure a minimum of 70% of hypertensive patients control their blood pressure. Since 2017, they have achieved consistent year-on-year improvement in HTN management. In 2020, the target was elevated to 80%.

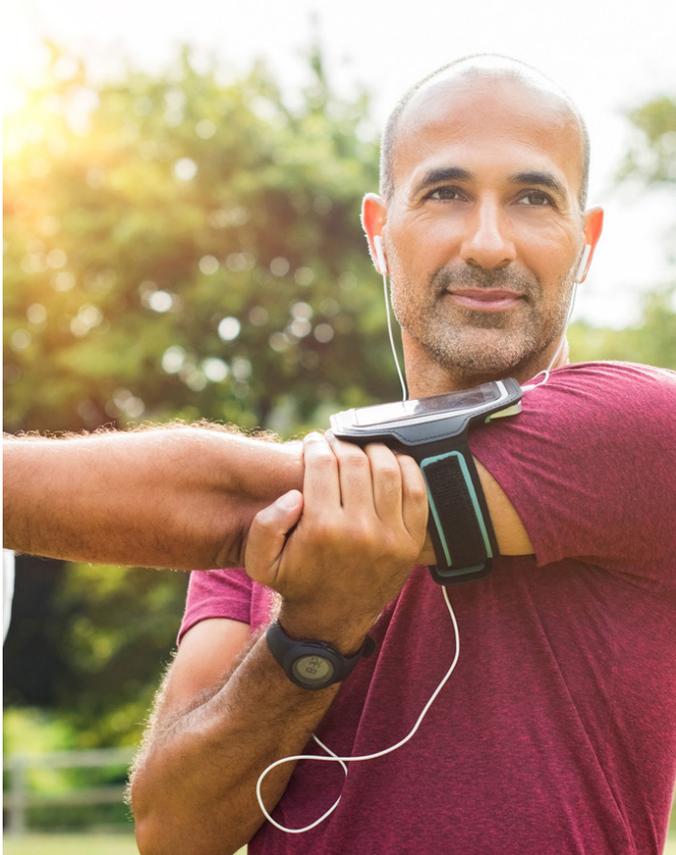
The results are further impressive because of the large patient population under its management. As of 2021, total of 105,672 unique patients had blood pressure monitored under this program. The number of patients with Stage-I and Stage-II hypertension actively monitored using this population health analytics platform at the end of 2021 was 16,009.

A summary of the year-on-year improvement in HTN management is illustrated below.

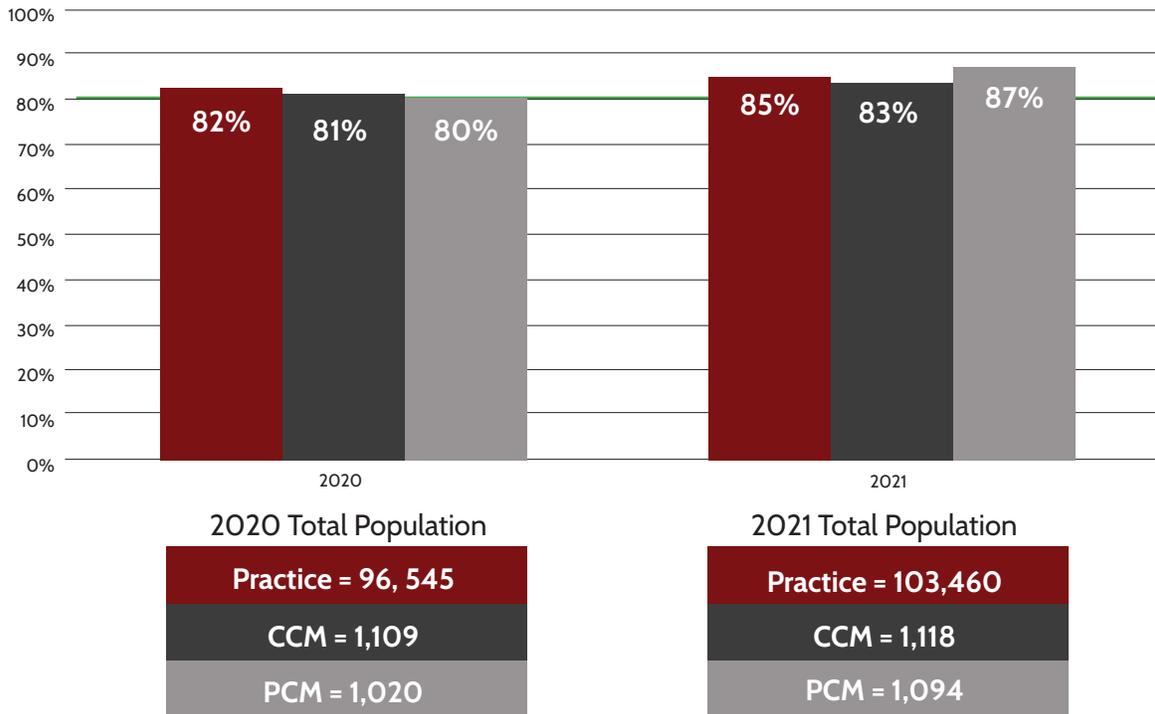


The practice has received the [AMA/AHA Target BP™](#) gold award for three consecutive years since 2018. In 2021, the practice was recognized with the Gold+ award for implementing best practices in HTN management education for staff and patients.

The practice has enrolled interested Hypertensive patients in its Principal Care Management (PCM) or Chronic Care Management (CCM) programs so that they can be monitored and managed in the long term.



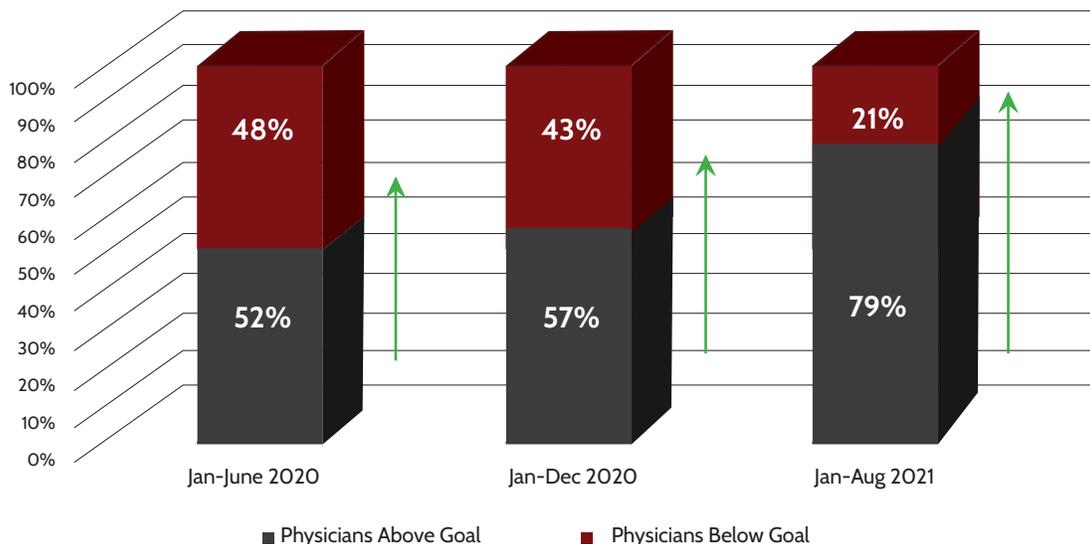
# Hypertension Management – A snapshot



In 2021, The PCM program attained target BP control in 87% of enrolled patients.

Any program cannot be successful without active physician buy-in and participation. Across the board, physicians have enthusiastically backed the program, and majority of the physicians currently have 80% of their patients' HTN under control. This result has been possible because of two key drivers namely, standardized protocols and processes and utilizing a bi-directionally interoperable Population Analytics platform with their EHR. The platform can directly send alerts into the patient's charts within the Electronic Health Records, eliminating the need for physicians to log in to multiple systems during patient office visits.

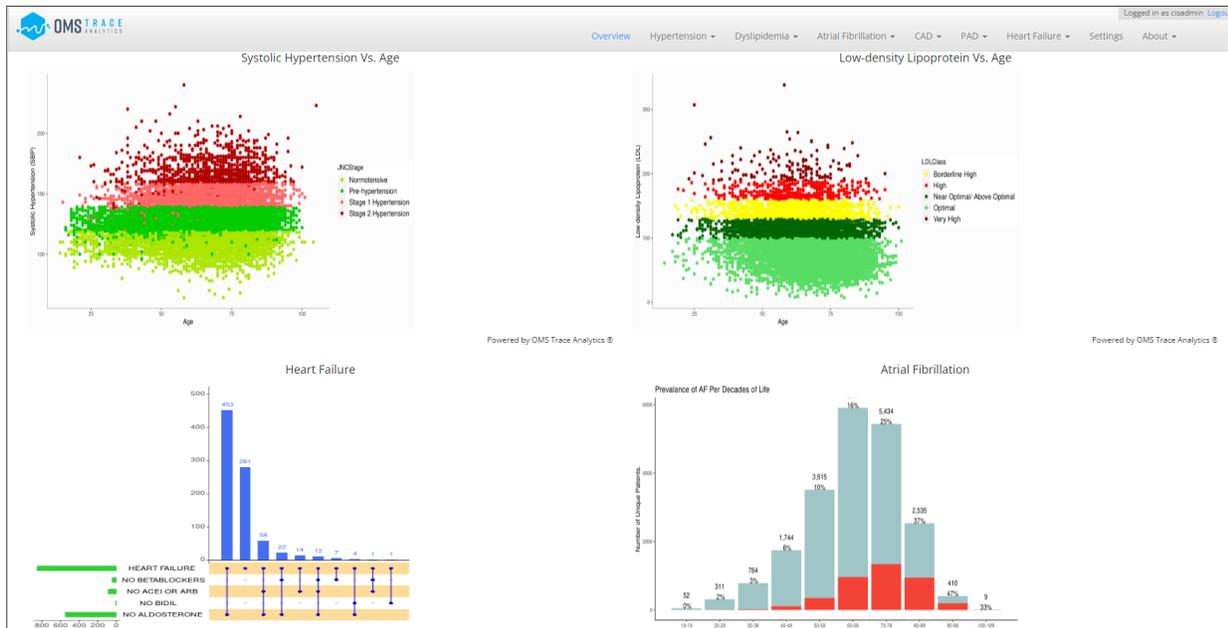
## Hypertension Control – Physician Trend



↑ 27% increase in physicians with HTN control at or above goal of 80% since June 2020

# OMS Trace Analytics®

Patient data from the Electronic Health Record is retrieved by the OMS Trace Analytics® population health platform on a nightly basis. The platform is equipped with dashboards focusing on six cardiovascular diseases: hypertension, dyslipidemia, atrial fibrillation, coronary artery disease, peripheral artery disease, and heart failure.



The dashboard provides ability to dynamically drill down from the population level view to an individual patient and immediately access their diagnoses, medications, allergies, vitals, and labs. Further, the EHR integration allows clinical messages from the Population Analytics platform into the patient's native EHR.

## References:

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- <https://www.cdc.gov/bloodpressure/facts.htm>
- <https://millionhearts.hhs.gov/tools-protocols/tools/health-IT.html>
- [https://www.internationaljournalofcardiology.com/article/S0167-5273\(21\)00152-2/fulltext](https://www.internationaljournalofcardiology.com/article/S0167-5273(21)00152-2/fulltext)

## Simplify Connected Care

Created by cardiologists for cardiologists, Objective Medical Systems' solutions are designed to help you focus on your patients and ease your workflow. [Schedule a 20-minute tour of our Cardiovascular Solutions today.](#)

The demo will walk you through the various features of the award-winning software.



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