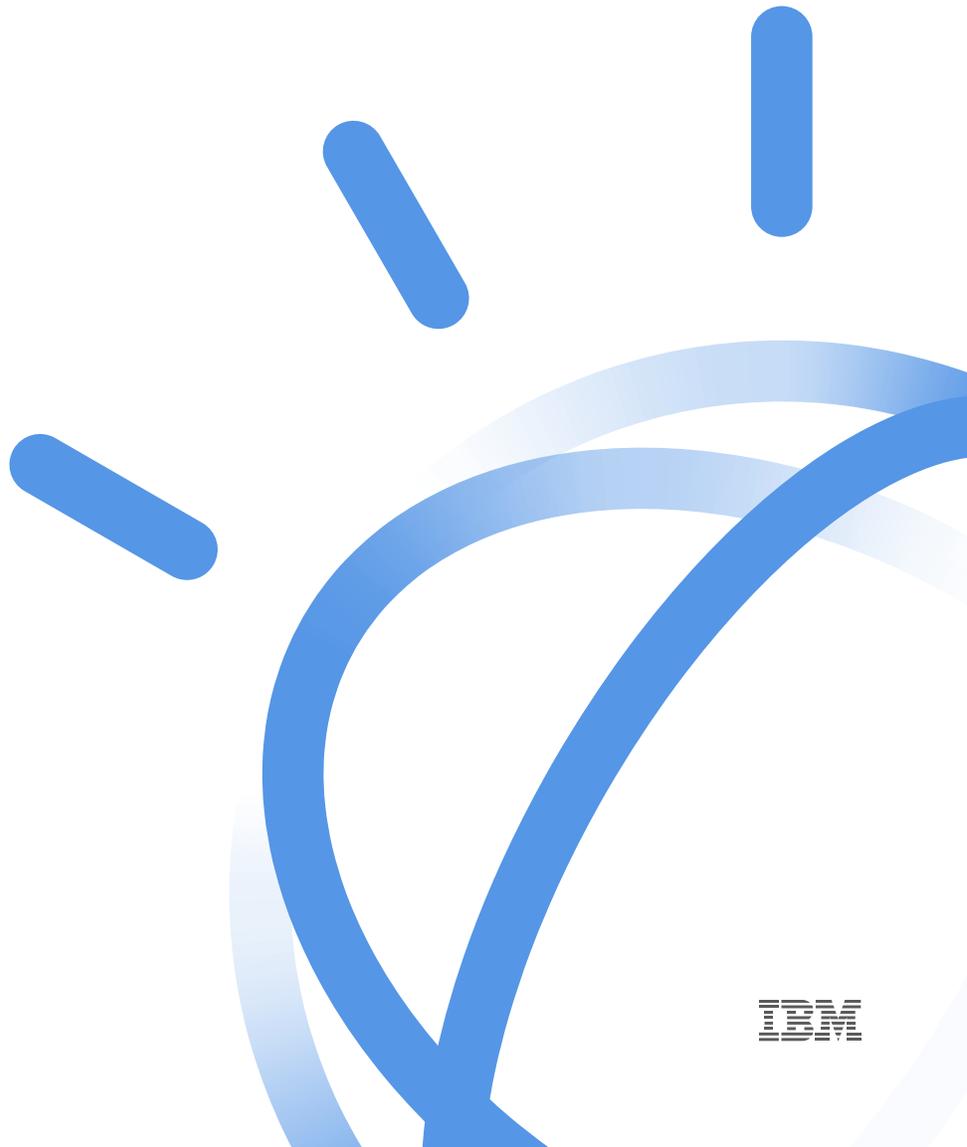


Arch Health Partners

Population health management platform anchors Arch Health's team approach to lowering hypertension



Overview

The need

To help improve the health of its hypertensive patients, Arch Health Partners initiated an eight-week population health management pilot using the Watson Health platform to identify and engage patients with out-of-control hypertension

The solution

Using the automation capabilities of Watson Health's population health management platform, Arch Health Partners was able to build a faster, easier, and more accurate patient registry that helped drive patient engagement and improve outcomes

The benefit

In-control hypertension population increased from 63 percent to 77 percent in six months; Medicare star rating increased to 4.5 stars; Medicare Patient Assessment Survey score jumped 8 percentage points to 90th percentile on question about whether patient receives reminders from physician's office; and now have the ability to scale combination of outreach and quality improvement initiative across all primary care practices, specialties

Often labeled the "silent killer" because it has no obvious symptoms, hypertension affects one in three US adults, or 67 million people, according to the Centers for Disease Control (CDC) and Prevention. Clinical leaders at Arch Health Partners, a multi-specialty group with more than 90 providers at 13 locations in San Diego County, were all too aware of these numbers.¹ A review of their own hypertension statistics had revealed that their own population of hypertensive patients was performing below the group's expectations. To help improve the health of these patients, Arch Health Partners initiated an eight-week population health management (PHM) pilot using the Watson Health™ platform to identify and engage patients with out-of-control hypertension.

Thanks to a combination of Watson Health technology, a team-based approach, and personal interactions with patients, the Arch Health Partners' pilot program increased the number of patients with blood pressure under control from 63 percent at the start of the pilot in January to 77 percent by June – greatly exceeding the initial goal of 70 percent for the full year. The organization anticipated that number to reach 80 percent by the end of 2014, delivering significant health benefits to its patients. After seeing these results, the group quickly began to expand the pilot to other physicians.

Managing populations through growth

In 2014, Arch Health Partners was named a top-performing physician organization for the fourth consecutive year by the California Integrated Healthcare Association (IHA). With physicians' offices and urgent care locations spread across San Diego, Poway, Ramona, San Marcos and Escondido, California, the organization is a prime contributor to the health and well-being of the citizens of San Diego County.

It is a responsibility Arch Health Partners takes very seriously, which is why there was heightened interest in hypertension after participating in the American Medical Group Association (AMGA) annual conference in 2013. AMGA had just launched its Measure Up/Pressure Down® program, a three-year national campaign designed to engage healthcare systems, providers, patients, employers and the entire nation in improving blood pressure control and achieving lasting improvements that lead the way to greater health, productivity, and cost savings.

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Solution components

Software

- IBM® Phytel Insight
- IBM® Phytel Coordinate
- IBM® Phytel Outreach
- IBM® Phytel Remind

“In the past, the only population health management tool we had to find patients with care gaps were quarterly claims reports. With Phytel we can extract clinical data directly from our electronic medical records (EMR) system on-demand, in real time, and then identify the patients who are out of control. That alone made building the patient registry faster, easier and more accurate.”

- Deborah Schutz, R.N., J.D., Director of Health Services Management at Arch Health Partners

According to the CDC, nationally only 47 percent of people diagnosed with hypertension have it under control.² Failure to control hypertension can lead to heart disease and stroke, two of the leading causes of death among Americans. When Arch Health Partners reviewed the statistics on hypertension among its patient population, the organization believed it had room for improvement.

“The numbers we saw among our patients, while better than the national average, were unacceptable by our standards,” says Dennis Mamaril, M.D., an Internist with Arch Health Partners and the physician who led the pilot program, as well as the organization’s transition to becoming a Patient-Centered Medical Home (PCMH). “We knew that helping our patients bring their hypertension under control would deliver multiple health benefits, including improving their longevity and quality of life.”

The first step in driving better outcomes was identifying at-risk patients from within a large (and growing) patient population. It proved to be a more difficult challenge than originally expected.

“As we’ve continued to grow, it has become difficult for us to manage our clinical data and improve quality scores because we’ve been doing it all manually,” says Deborah Schutz, R.N., J.D., Director of Health Services Management at Arch Health Partners. “We realized if we were going to increase the quality and frequency of patient engagement that we would need to automate some of our processes.”

Automating population health management

Arch Health Partners had previously implemented the Watson Health platform, a robust PHM solution that allows providers to automate registry building, patient outreach, appointment reminders and other repetitive, labor-intensive tasks so clinicians can focus on care. It was now viewed as the ideal technology to use in launching the hypertension management program.

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Multi-disciplinary approach

With the challenge of identifying and stratifying hypertensive patients solved, Dr. Mamaril and Scott Flinn, M.D., Medical Director of Arch Health Partners, began building a multi-disciplinary team that included physicians, Licensed Vocational Nurses (LVNs), dieticians, medical assistants and in-house pharmacists.

“One of the key roles for the pharmacists was to help me set up the program,” says Dr. Mamaril. “We used the Phytel platform to select all the hypertensive patients from the EMR, and risk-stratify them into those who were in control and those who were out-of-control. We also sub-divided the population based on whether they had a co-morbidity for diabetes or were on an ACE inhibitor. Michael Kruse, Pharm.D. then set up a hypertension treatment algorithm using evidence-based guidelines from AMGA, the

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– Dennis Mamaril

American Heart Association and the American College of Cardiology. In many cases it required combination therapy to improve outcomes and compliance. Both he and Jessica Malaty, Pharm.D., also took an active role in speaking with patients who might have avoided treatment in the past because they didn’t want to speak with a doctor.”

Once the program was set up, the team would meet for weekly huddles to determine what was working, what wasn’t, and to develop a list of action items in order to implement rapid-cycle improvements to the program. “We learned quite a bit from the beginning of the program to the end of the pilot, and made many adjustments,” Dr. Mamaril says. “One thing that became obvious, though, was that including the pharmacists can help extend a program like this out to many other chronic diseases.”

Driving patient engagement

The pilot program used a combination of automated and personal calls made by health care providers to help them close care gaps in hypertensive patients once they were identified. Typically, Arch Health Partners would start with the Watson Health solution that uses customer-provided criteria (e.g., missed or overdue appointments, overdue necessary tests, etc.) to help them identify patients with care gaps. They would then use the Watson Health platform to generate automated outreach to the patients to contact their physician at Arch to make an appointment. If there was no response after three attempts, the information would be handed to a medical assistant to make a personal follow-up call. The medical assistants would stress the importance of controlling blood pressure, explain the consequences uncontrolled blood pressure could lead to and recommend scheduling an appointment to have their blood pressure checked. The list of patients who still didn’t respond was then given to Dr. Mamaril, who would call them himself to stress the importance of taking action.

“Phytel is very efficient,” he says. “I like the fact that I can refresh the list every day so I always have timely information. Also that I can use the system to dig a little deeper when needed in a matter of minutes rather than waiting hours or days for a report. It can really make a difference when you’re trying to change a patient’s behavior.”

Part of the success of the program has been how easy and convenient it is for patients to receive the care they need. For example, when LVNs and medical assistants call, they can promptly schedule appointments with Dr. Mamaril or Jessica. The final choice is based on several factors.

“If the patient hasn’t been in for a while and needs a lipid panel and other tests, they’ll see Dr. Mamaril,” Jessica explains. “But if they need a blood pressure check or a medication review, it really depends on who is available. I have more availability than Dr. Mamaril so the appointments will often be scheduled with me.”

No matter who is scheduled, the appointment is focused on helping patients become more engaged in getting their blood pressure under control and keeping it there. For Jessica, that means taking extra time with patients to ask them questions that make them think about the issues more deeply.

“My style is more motivational interviewing,” she says, “so once they’re in I’ll work with them to make sure they understand why taking an active interest in controlling their blood pressure is important, ask what changes in their lifestyle they think they can make to improve it, things like that. Medications can help, but I am a big believer in lifestyle modifications. We try to tailor the visit to the patient’s concerns. We assess their current medications and lab results and, if needed, we put together a new treatment plan. The more they’re involved in the decisions, and understand the repercussions, the more likely they are to make the changes that create improvement.”

This method of working with patients has helped Jessica uncover information that has made a distinctive difference in patient lives.

“I had one patient who was very non-compliant, whom the Phytel platform helped identify,” she says. “It turned out he was just confused. He had four or five prescribed hypertension medications, and wasn’t taking one of them. But he was taking a double dose of his wife’s medication. We cleaned up his meds and talked to him about diet. He was eating rice with every meal, so we swapped out one bowl for a salad and built a plan to help him increase his aerobic activity, which he wanted to do. He is now at his blood pressure goal, and has a sense of ownership of his own plan. All because we brought him in and talked to him.”

Exceeding expectations

When Arch Health Partners launched the pilot program, just 63 percent of Dr. Mamaril’s hypertension population was considered under control. The goal of the program was to raise that number to 70 percent by the end of 2014. The actual results exceeded those expectations.

“In just six months we were able to elevate that number to 77 percent,” says Dr. Mamaril. “With the success we’ve been achieving, we believe we can get 80 percent of our patients under control by year end. Those are extraordinary results. We couldn’t have done this with our EMR alone. Phytel’s ability to help us identify and manage that population has definitely been a key to this rapid improvement.”

The patients have noticed the difference as well. Recent results from the Medicare Patient Assessment Survey was a significant contributor to Arch Health Partners’ latest Medicare Star Rating of 4.5 out of 5 stars. The question asking whether patients receive reminders from their doctor’s office jumped 8 percentage points, putting Arch Health Partners into the 90th percentile for that question. High scores on the survey are important not just clinically but financially since it accounts for 20 percent of California’s pay for performance payment. Other physicians at Arch Health Partners are beginning to notice as well.

“Our colleagues are seeing the results we’re achieving, and the increase in patient visits, and have started asking how we’re doing it,” Dr. Mamaril says. “One physician mentioned that a patient he hadn’t seen in two years had developed very high blood pressure. The physician discovered the patient was on the wrong medications. We wouldn’t have known that without

Phytel identifying him as being overdue for an appointment and our efforts to bring him in. That patient was close to a possible heart attack or stroke. His condition has since been corrected, so it's clear we are literally saving lives. My hope is that stories like this will incentivize more physicians to participate more actively in the program.”

Measuring up

In addition to its patient engagement benefits, the Watson Health platform also gives the team an opportunity to measure their progress with the overall population. A dashboard makes it easier to monitor how many of the identified patients have been contacted, how many have made appointments for blood pressure checks, labs or physicals, and whether their blood pressure is under control – or at least trending in the right direction. Team members typically review the dashboard multiple times each week.

“It's nice to see that the efforts we're putting in are working,” Jessica says. “It encourages us to keep going. And if we're hitting a plateau we know we need to start reaching more patients. It really helps tailor what we're doing for the coming week.”

Arch Health Partners has been actively sharing its results with the County of San Diego, which has its own hypertension program called the Right Care Initiative. The goal is to reduce morbidity and mortality within the county from chronic disease, particularly cardiovascular disease related to hypertension, and diabetes.

“The county has also adopted Measure Up/Pressure Down,” says Dr. Mamaril. “We've been sharing our data with them, and Dr. Flinn, who is the Chairman of the Right Care Initiative, has been working with them to publicize our success in the hopes that more healthcare providers and hypertension patients see them and take action.”

Expanding in the future

The next step for Arch Health Partners is to expand the hypertension program and get more physicians and other team members directly involved. Although he expects some natural resistance, Dr. Mamaril believes it will set a better course for the future.

“We would like to extend this program out to all our primary care physicians,” he says. “All of our doctors have now seen it, but it does represent a major cultural shift. It's something we need to do, especially as the industry continues to shift toward pay for performance and we transition to the PCMH model. We're hiring another LVN to assist with education, which should help. Ultimately, we would like to see this model used to help patients control many chronic diseases and conditions. Phytel gives us the means to do that.”

Watson Health population management platform product distinctions support the ability of healthcare providers to:

- Drive population health management
- Identify gaps in care across a patient population
- Automate patient messaging with repeats at present intervals
- Easily build “contact lists” for personal outreach
- Utilize the dashboard to help the monitor program progress
- Implement the Watson Health registry, which integrates with EHR, lab, PM and other systems
- Realize return on investment (ROI)

About IBM Watson Health

In April 2015, IBM launched IBM Watson Health and the Watson Health Cloud platform. The new unit will work with doctors, researchers and insurers to help them innovate by surfacing insights from the massive amount of personal health data being created and shared daily. The Watson Health Cloud can mask patient identities and allow for information to be shared and combined with a dynamic and constantly growing aggregated view of clinical, research and social health data.

For more information on IBM Watson Health, visit: ibm.com/watsonhealth.

Footnotes

1 CDC Vital Signs, September 2012, NHANES 2003-2010; <http://www.cdc.gov/media/releases/2012/images/dpk-hypertension-chart1.html>

2 Centers for Disease Control and Prevention; Announcements: National High Blood Pressure Education Month - May 2014, 5/2/2014 / 63(17), 386-386; <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6317a5.htm>

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IBM Corporation
Software Group
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Somers, NY 10589

Produced in the United States of America
June 2016

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