



Improving Heart Health with Virtual Care

Virtual care solutions can achieve improved cardiac outcomes for your patients, while helping them manage their conditions and health from the comfort and safety of their own homes.

The Prevalence and Impact of Heart Disease in the United States

Heart disease is the leading cause of death in the United States. According to the Centers for Disease Control and Prevention (CDC), it causes approximately 655,000 deaths each year. Not only does it significantly impact the health of Americans, but it also costs the healthcare industry more than \$200 billion in services, medicine, and lost productivity.

The price and impact of heart disease is a heavy one to pay, making it one of the greatest challenges the healthcare industry faces.

Improving the outcomes for people living with cardiovascular diseases (CVD) is needed to save lives across the country. In fact, 121.5 million, or nearly half of American adults are living with CVD. Additionally, the percentage of people impacted increases with age, with it reaching as high as 42% of Medicare beneficiaries aged 65 years or older having at least one heart condition.

Effective self-management and preventative care can be highly successful in the long-term management of heart disease. People living with conditions such as high blood pressure and high cholesterol are at an increased risk for heart disease. Often, they are not even aware they have these conditions. Providing them with the right access to care can effectively control these leading indicators of heart failure and even prevent heart attacks and strokes.

Unfortunately, many barriers that prevent people from recognizing their conditions and receiving much-needed healthcare. They may face several challenges to improving their health including access to: Convenient, consistent, and affordable monitoring.

- Health care professionals.
- Convenient, consistent, and affordable monitoring.
- Medication, including financial barriers.
- Continuity of clinical care across healthcare providers.
- Community support that influences social determinants of care.

Leveraging preventative care to manage heart health is essential to closing the gaps between patients and access to care. It is a critical success factor to the long-term health and wellness of cardiac patients as well as a necessity for the healthcare system as a whole.

The Changing Healthcare Landscape: The Impact of Virtual Care

The healthcare industry is consistently evolving and finding new ways to deliver better care to patients. For example, it wasn't too long ago when preventative care screenings of blood pressure tests were performed exclusively in the office. Now, patients can receive these types of tests and monitoring from the comfort of their homes.

Increasing Healthcare Value and Affordability with Technology

According to the CDC, virtual care can be defined as delivering healthcare and education over a distance using electronic and telecommunication technologies. It can include text messaging, phone calls, and interactive content on an electronic device. With recent changes in policy brought about by the COVID-19 pandemic, the U.S. telehealth market is expected to reach \$10 billion in 2020 with high double-digit YoY growth of approximately 80%. This trend towards virtual care is not expected to reverse or slow down post-COVID.

Programs that offer these services can include Remote Patient Monitoring (RPM), which uses devices to record patient health data to send to providers. It can also include Care Management, such as Chronic Care Management and Principal Care Management, which connects patients to a care team that can help them better manage their heart health with consistent phone calls and tailored care plans.

While virtual care has been used in the healthcare industry for years, it was not until the recent pandemic that adoption surged because it proved to be a useful tool in supporting and delivering preventative care to at-risk populations, including cardiac patients. It has since become an increasingly popular solution with 76% of U.S. hospitals leveraging video and other technologies to connect with patients and consulting practitioners.

In fact, the American Heart Association recommends the use of virtual care services for improving cardiovascular outcomes because it can reduce "many widespread disparities in access to care, particularly those attributable to geography or provider shortages."

While the height of the pandemic has passed, many practices are continuing to implement virtual care solutions, especially since they have proven their value. They save time and money, lower barriers to patient engagement, and reduce emergency department and urgent care center visits. They also allow patients to receive more one-on-one time with their healthcare team and providers to offer a higher quality of care.

In addition to these benefits, the implementation of virtual care can reduce barriers that some patients face and improve their clinical outcomes.

For example, studies found that patients at high risk of CVD saw outcomes like improvements in diet, physical activity, drug adherence, satisfaction with access to care, treatment received, and care coordination after utilizing virtual services.

As virtual care options expand past traditional telehealth models, we can expect to see a continued improvement in the long-term cardiac outcomes and a subsequent decrease in costs for both patients and the healthcare system alike.

Leveraging Virtual Solutions to Better Address Heart Health

With cardiovascular disease disproportionately affecting Medicare beneficiaries, the risk to develop or worsen it can become significantly higher if patients avoid traditional office visits and do not have the necessary resources to manage these types of conditions.

Virtual care can close the gap between patients needing care and not being able to receive it.

Leveraging virtual care is an increasingly popular and viable option for cardiovascular disease management. Programs that offer these management services can include Care Management and Remote Patient Monitoring (RPM). These services can improve patient experience, quality of care, and outcomes while reducing healthcare spending. While the aging population was initially hesitant to adopt it, the COVID-19 pandemic increased the need for remote care significantly.



Virtual care also grants this vulnerable population greater access to the care they need and provides them with a higher quality of care. Employing patient engagement strategies alongside technology can prove highly successful in ongoing adoption and engagement.

Care Management for Cardiovascular Disease

Keeping patients engaged in a virtual care solution like care management can drive positive outcomes for heart health. This is because Care Management programs work to educate and empower people living with heart conditions to ultimately improve their health with self-management.

Care Management programs connect patients with a dedicated care team that provides 24/7 support and consistent proactive outreach. These clinical interactions keep patients engaged, teach them how to manage their health, and provide support in between office visits.

With each interaction, patients are more likely to participate in preventative care measures and adopt the necessary lifestyle changes required to improve their health. This can be especially beneficial for cardiac patients. They can help them lower their blood pressure or cholesterol while also keeping them out of the hospital and emergency room because of heart failure.

Additionally, these programs give providers greater visibility into their patients' health, help improve practice compliance with value-based measures and increase patients' ease of access to wellness resources.

Remote Patient Monitoring (RPM) for Cardiovascular Disease

Another solution proven to have positive results in helping Medicare cardiology patients better manage their heart disease is Remote Patient Monitoring.

Patients are matched with easy-to-use devices. For example, pulse oximeters and pressure cuffs that seamlessly connect through a cellular signal to an RPM platform. Along with tracking their self-reported health data, which their providers can monitor in real-time, they can also communicate regularly with their care team. Together, this approach can help patients feel at ease with their solution and lead to a higher rate of participation and engagement in lifestyle modifications than typical care and self-monitoring. It can also lead to improved health outcomes, self-management, and compliance.

The program's ability to be conducted outside the traditional clinical visit with remote care can offer care teams and providers access to more timely, accurate, and consistent clinical data. Tracking patients' health metrics such as blood pressure or oxygen levels can help providers gain a more comprehensive view of their patients' health. It can also help them detect health concerns such as elevated blood pressure and intervene sooner on their behalf. This can be especially helpful because these changes may not be noticeable to the patient, and in the absence of an appointment with a healthcare provider, would not be detected until it's too late.

Driving Better Cardiovascular Outcomes

Establishing successful cardiovascular disease management can depend on implementing virtual care solutions that not only educate and support patients in their lifestyle changes but produce measurable clinical outcomes for them.

Within virtual care's framework are multiple strategies that when combined, can drive better outcomes. These include keeping patients involved in their health decisions and offering greater access to care, consistent communication, quality of life, and early detection.

All these aspects can help support better heart health. In fact, studies show that virtual care can improve outcomes such as:

- Lowering patients' blood pressure levels
- Reducing rates of emergency room visits and hospitalizations due to heart failure
- Helping patients become half as likely to have a heart attack or stroke

Studies of Care Management programs have documented outcomes that include the following:

- Reduced readmission rate to the hospital due to heart failure by up to 30%
- Improved quality of life by 7.14 points
- Reduced emergency department visits by 49%

Studies of Remote Patient Monitoring programs have documented outcomes that include the following:

- 33% decrease in hospitalizations due to heart failure
- 4.7 mmHg decrease in systolic blood pressure
- 1 mmHg decrease in diastolic blood pressure

Virtual care is proven to effectively deliver positive outcomes for cardiac patient populations. By implementing solutions that implement strategies like the ones above, providers will be able to extend patient access to care, reduce risk factors for heart disease, and improve self-management. In turn, this can lead to greater patient satisfaction, compliance, and healthcare savings.

Making a Significant Impact

In the last five years, Wellbox has delivered care to more than 26,000 patients with chronic cardiovascular conditions with its solutions. Among the numerous clinical outcomes achieved for its partners, two recent patient stories demonstrate the impact of virtual care on cardiac patients' clinical outcomes.

Early Detection and Intervention

Our clinical team had a patient enrolled in the RPM program who has hypertensive heart disease with heart failure and whose blood pressures were consistently elevated. The RPM device recognized the high blood pressure levels and allowed our team to alert her provider of the risk and intervene quickly by changing her medication. If she had not been enrolled in the program, the patient's blood pressure would have gone unnoticed and could have resulted in additional health complications.

Comprehensive View of Patient Health

One of our care coordinators shared that her proudest moment at Wellbox was when she discovered a missing link in a patient's background that ultimately led the patient to receive much-needed hypertension medication.

During a routine conversation with a patient, our care coordinator asked about symptoms of high blood pressure. She revealed she had had high blood pressure readings in her traditional office visits for at least a year. She also frequently had headaches, became physically ill with exercise or exertion, and admitted to seeing "stars" occasionally.

It was then our nurse offered her education on hypertension and glaucoma. Our nurse also followed up with her primary care provider with the documented blood pressure readings from the last 12 months, many between 150-200 systolic, and let them know of the patient's family's history with cardiac disease. Her mother had suffered a heart attack when she was only a few years older than the patient was at that time.

The patient made an appointment with her primary care provider and shortly after, she started taking hypertension medication.

Our care coordinator reflected that sometimes the big picture is hard to see when flipping through the tabs of an electronic health record. Therefore, summarizing everything from these interactions and getting some of the patient's family history can be the missing link.

Summary

In conclusion, virtual care solutions such as Chronic Care Management, Principal Care Management, and Remote Patient Monitoring can be successfully leveraged with cardiac populations to:

- Extend patient access to care and improve self-management
- Offer early detection of health concerns and clinical visibility
- Improve clinical and financial outcomes

With its unique experience and best-in-class virtual care solutions, Wellbox is making a significant, positive impact on chronic illness in America. Its proven results include lowering healthcare costs, increasing practices' revenue and quality measure performance, improving patient experience, and ultimately, improving population health outcomes for cardiac patients.



On a Mission to Improve Lives

Wellbox works with chronically ill patients and their healthcare providers to enable healthier, happier and longer lives while decreasing the financial burden of chronic illness to the healthcare system.

Wellbox is dedicated to making a profound, positive impact on chronic illness in America by;

- Empowering people living with chronic illnesses to be well,
- Enabling success for those caring for people with chronic illness and,
- Reducing the negative impact of chronic illness on our healthcare system.

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References

1. Drewes, H., Steuten, L., Lemmens, L., Baan, C., Boshuizen, H., Elissen, A., . . . Vrijhoef, H. (2012, March 14). The effectiveness of chronic care management for heart failure: Meta-regression analyses to explain the heterogeneity in outcomes. Retrieved March 04, 2021, from <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1475-6773.2012.01396.x>
2. Gordon, S., By, Davidson, J., Rapaport, L., Welch, A., Williams, K., & Weiss, K. (n.d.). Remote cardiac device monitoring: Why aren't you doing this already?: Everyday health. Retrieved March 04, 2021, from <https://www.everydayhealth.com/heart-health/remote-cardiac-device-monitoring-why-arent-you-doing-this-already/>
3. Heart disease facts. (2020, September 08). Retrieved March 04, 2021, from <https://www.cdc.gov/heartdisease/facts.htm#:~:text=Heart%20Disease%20in%20the%20United%20States&text=One%20person%20dies%20every%2036,1%20in%20every%204%20deaths>
4. Noah, B., Keller, M., Mosadeghi, S., Stein, L., Johl, S., Delshad, S., . . . Spiegel, B. (2018, January 15). Impact of remote patient monitoring on clinical outcomes: An updated meta-analysis of randomized controlled trials. Retrieved March 04, 2021, from <https://www.nature.com/articles/s41746-017-0002-4>
5. Rpm paired with telehealth may reduce cardiac events. (2020, October 20). Retrieved March 04, 2021, from <https://rpmhealthcare.com/rpm-paired-with-telehealth-may-reduce-cardiac-events/>
6. Salisbury, C., O'Cathain, A., Thomas, C., Edwards, L., Gaunt, D., Dixon, P., . . . Montgomery, A. (2016, June 1). Telehealth for patients at high risk of cardiovascular disease: PRAGMATIC randomised controlled trial. Retrieved March 04, 2021, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4896755/>
7. Schwamm, L., Lee H. Schwamm (2016, December 20). Recommendations for the implementation of TELEHEALTH in cardiovascular and Stroke care: A policy statement from the American Heart Association. Retrieved March 04, 2021, from <https://www.ahajournals.org/doi/full/10.1161/CIR.0000000000000475>
8. Shah, N., Healthcare, N., Fonner, C., Healthcare, C., Manders, N., Healthcare, N., . . . (2019, September 04). Abstract 028: Remote health monitoring platform reduces blood pressure and Crisis Hypertension. Retrieved March 04, 2021, from https://www.ahajournals.org/doi/10.1161/hyp.74.suppl_1.028
9. Van Wageningen, J. (2019, May 01). How telehealth can improve heart disease management. Retrieved March 04, 2021, from <https://healthtechmagazine.net/article/2019/02/how-telehealth-can-improve-heart-disease-management>
10. What works in chronic care management: The case of heart failure. (n.d.). Retrieved March 04, 2021, from <https://www.commonwealthfund.org/publications/journal-article/2009/jan/what-works-chronic-care-management-case-heart-failure>

