



# Overcoming Prevalent Chronic Diseases with Virtual Care

Virtual care solutions can achieve improved outcomes for the 157 million people living with diabetes, lung disease, and heart disease in America by helping them more proactively and consistently manage their conditions.

# The Prevalence and Impact of Chronic Disease in the United States

Chronic diseases such as heart disease, diabetes, and lung disease are among the greatest ongoing healthcare challenges the United States faces. According to the Centers for Disease Control and Prevention, 6 in 10 Americans live with at least one chronic disease, making it a leading driver of the nation's \$3.8 trillion in annual healthcare costs. They are also among the leading causes of death and disability.

For example, heart disease causes approximately 868,000 deaths each year. This costs the healthcare industry more than \$200 billion in services, medicine, and lost productivity.<sup>1</sup>

Additionally, 13% of all U.S. adults are currently living with diabetes and 1.5 million new cases are diagnosed every year. The percentage of people impacted increases with age, reaching as high as 26.8% among those who are 65 years or older. Because of this, the expanding population of diabetics poses additional challenges to an already overburdened healthcare system. In fact, in 2017, diabetes cost the U.S. healthcare system \$327 billion.<sup>2</sup>

Finally, nearly 37 million Americans live with chronic lung diseases like asthma and COPD, but millions more may have lung diseases without even knowing it.<sup>3</sup> This can be devastating because COPD is the third most common cause of death in the U.S. In 2010, COPD cost the U.S. \$50 billion in healthcare expenditures.<sup>4</sup>



The price and impact of chronic diseases is a heavy one to pay, making it incredibly difficult for the healthcare industry to overcome. Therefore, improving outcomes for chronically ill populations is essential for the long-term health and wellness of patients as well as a necessity for the healthcare system.

Although chronic diseases may never be fully cured, these conditions can be manageable, or even preventable, with effective virtual care solutions that emphasize preventative care.

## Sources

1. National Center for Chronic Disease Prevention and Health Promotion | 2. American Diabetes Association | 3. American Lung Association | 4. ClinicoEconomics and Outcomes Research, 2013.

# Leveraging Virtual Solutions to Better Address Chronic Diseases

Chronic illnesses are greatly influenced by lifestyle choices and habits. When patients embrace healthier behaviors, they can often manage and even improve their illness. Inversely, when they do not have access to necessary resources to handle these conditions or do not comply with recommended care plans, their health can often worsen. This can result in unnecessary emergency room visits and hospitalizations.

## Virtual care empowers patients to make these positive changes.

Leveraging virtual care is an increasingly prevalent and practical option for managing common conditions such as heart disease, diabetes, and lung disease. Programs that offer disease management services include Chronic Care Management, Principal Care Management, Annual Wellness Visits, and Remote Patient Monitoring (RPM). These services improve patient experience, quality of care, and outcomes while reducing healthcare spending.



Since they integrate strategies that promote best practices, they have proven to be highly successful in the ongoing adoption and engagement of value-based care. This is especially valuable since the goal for value-based care is to reduce the effects of chronic conditions and focus on clinical outcomes.

# Virtual Care Best Practices

## #1 Identify the Right Patients

Identifying patients by their risks, conditions, and coverage can help care teams better understand them and their unique care needs. They can suggest better care coordination to support patients and help improve their overall health and outcomes.

## #2 Provide Education

When patients understand their conditions and what they can do to improve them, they are more likely to participate and see the results as worth it.

## #3 Engage in Shared Decision-Making

Patients tend to be more motivated in their treatment when they help decide on it. That's because the planning not only came from their care team but included their input, which often makes them feel heard and appreciated.

## #4 Deliver Continuous Care

Solutions like Care Management and Remote Patient Monitoring make it possible to offer greater access to care and deliver it consistently. With their ability to offer personalized care and support throughout the patients' wellness journey, they help create a better experience and keep patients motivated in their health goals.

## #5 Advance Value-Based Care

By improving patient health outcomes, virtual care helps fulfill the goal of value-based care. It does this by reducing the compounding complexity and disease progression that drive the need for more care. It also lowers the costs associated with ongoing care while keeping patients healthier in the long term and improving the quality of care.

**Furthermore, these programs are beneficial because they give providers greater familiarity into their patients' health progress, help improve practice compliance with value-based measures, and increase patients' ease of access to wellness resources.**

# Delivering Comprehensive Virtual Care to Your Patient Population

Leveraging multiple technologies and approaches to population health can drive better results for healthcare organizations. For example, solutions that offer real-time, actionable data can be used to intervene sooner on health concerns while others that emphasize providing consistent guidance and support can empower patients in their decision-making.

Implementing a wide range of preventative care solutions for your patient population can help deliver care to the ones who will most benefit from them. They can also benefit your organization as a whole by reducing the total cost of care, improving the quality of care, and driving proven clinical outcomes. Some examples include Remote Patient Monitoring, Annual Wellness Visits, and Care Management.

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## Care Management for Top Chronic Diseases

Virtual care programs like care management can be key to keeping patients engaged in their health. This is because this model emphasizes personalizing care to the patient. It achieves this with elements such as healthcare coaching, care plan development, and care coordination.

By connecting patients living with chronic diseases like heart disease, lung disease, and diabetes to a dedicated care team, they receive support needed to achieve health goals. In fact, these programs succeed because they provide disease and self-management education, recommend appropriate preventative measures, keep them accountable, identify health concerns efficiently, and drive positive outcomes.



These clinical interactions also help patients make the difficult but necessary lifestyle changes required to improve their health by minimizing and eliminating barriers. For example, they may suggest patients become more physically active, eat less processed foods, avoid tobacco smoke, and maintain a healthy weight. These changes can improve outcomes such as reducing hospitalizations and emergency room visits.

## Remote Patient Monitoring for Top Chronic Diseases

Since self-management of these diseases is closely tied to lifestyle changes, adopting an easy-to-use platform that continuously monitors patients can be valuable. Remote Patient Monitoring has proven to deliver positive results in helping patients manage their heart disease, lung disease, and diabetes.

Devices such as glucometers, pulse oximeters, and pressure cuffs that seamlessly connect through a cellular signal to an RPM platform require little behavior change for patients when it comes to collecting their health data. This is a key success factor for adoption.

Along with tracking their health data, they can also communicate consistently with their care team. Together, this approach helps patients feel comfortable with their solution and improves participation and engagement in lifestyle modifications than typical care and self-monitoring. It can also lead to better health outcomes and compliance.

Additionally, this program offers care teams and providers access to relevant patient data, allowing them a more thorough view of the patient's health progress. They can also detect health concerns such as elevated blood pressure or acute exacerbations and intervene sooner on their behalf. This can then lead to better-informed, personalized visits and patients receiving better care because of it.

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## Annual Wellness Visits for Top Chronic Diseases

Adopting solutions that offer preventive care that is efficient and convenient can help improve outcomes for high-risk patients. Annual Wellness Visits are a service that exclusively emphasize preventive care that is personal to the individual patient. They can also be completed virtually.

Designed to be a conversation between providers and patients, this service helps patients better understand their health and ensures their future care visits are better-informed. This is because it can encompass issues such as “family health history, managing medications, and screenings for issues such as depression, food insecurity, and in-home safety,” according to The County.<sup>1</sup>

These visits establish a guideline for care teams so they know how their patients' health progresses with time and can suggest relevant care recommendations. It also allows them to identify any risk factors and help prevent them. For example, if a physician is unaware of concerns such as a family history of high cholesterol, they may be less likely to address the issue to help prevent it.

These efforts can be especially beneficial for patients living with chronic conditions such as diabetes, lung disease, and heart disease because they can effectively reduce hospitalizations and healthcare costs.

### Sources

1. The County Article, 2021.

# Driving Better Patient Health Outcomes

Establishing successful chronic disease management can depend on implementing virtual care solutions. For example, solutions like Care Management and Remote Patient Monitoring have been found to improve overall outcomes. In fact, a study found that RPM reduced hospitalizations related to heart failure, COPD and diabetes by 62%.<sup>1</sup>

For the top chronic diseases, virtual care's framework offers multiple strategies to drive better outcomes. This includes 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 health for those with heart disease, diabetes, and lung disease.



## Improved Clinical Outcomes for Heart Disease

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%<sup>2</sup>
- Improved quality of life by 7.14 points<sup>3</sup>
- Reduced emergency department visits by 49%<sup>4</sup>

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

- 33% decrease in hospitalizations due to heart failure<sup>5</sup>
- 4.7 mmHg decrease in systolic blood pressure<sup>6</sup>
- 1 mmHg decrease in diastolic blood pressure<sup>7</sup>

### Sources

1. A LeadingAge CAST Report, 2013. | 2. The Commonwealth Fund Journal Article, 2009. | 3. Health Services Research Article, 2021. | 4. HealthTech Magazine Article, 2019. | 5. Everyday Health Article, 2020. | 6. American Heart Association Article, 2019. | 7. Becker's Hospital Review Article, 2018.



## Improved Clinical Outcomes for Diabetes

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

- Reduced A1c levels from 9.2% to a notably low 7.0%<sup>1</sup>
- Decreased HbA1c values and lipid ratios<sup>2</sup>
- Positive clinical outcomes in diabetes management<sup>3</sup>

Studies of Remote Patient Monitoring programs have documented outcomes that include the following:<sup>4</sup>

- 67% decrease in HbA1c values
- 58% decrease in BMI
- 67% increase in patient activation scores



## Improved Clinical Outcomes for Lung Disease

Studies of virtual care programs have documented outcomes that include the following:

- 80% reduction in acute exacerbations<sup>5</sup>
- 77% agree on a better collection of patients' overall health status<sup>6</sup>
- 74% agree that better education was provided about COPD, treatments, and self-management plans<sup>6</sup>
- 81% agree on improved smoking cessation with patients<sup>6</sup>
- 25% increase in patient medication adherence<sup>7</sup>
- Reduction in COPD related healthcare costs<sup>8</sup>

**Virtual care is proven to effectively deliver positive outcomes for chronically ill populations. By implementing solutions that implement strategies like the ones above, providers will be able to reduce hospitalizations, improve self-management, and better patients' overall health status. As a result, this can lead to greater patient satisfaction, compliance, and healthcare savings.**

### Sources

1. Managed Care Digest Series, 2018. | 2. The Annals of Family Medicine Research Article, 2007. | 3. National Centers for Disease Control and Prevention Systemic Review, 2013. | 4. ResearchGate Article, 2018. | 5. Journal of Thoracic Disease Article, 2019. | 6. The American Journal of Managed Care Article, 2021. | 7. The Journal of the American Medical Association Article, 2019. | 8. Personal Connected Health Alliance Article, 2019.

# Making a Significant Impact

In the last six years, Wellbox has delivered care to more than 75,000 patients, conducted over 400,000 billable interactions, and worked with more than 50 chronic disease states with its solutions. Among the numerous clinical outcomes achieved for its partners, these recent patient stories for these three common conditions demonstrate the impact of virtual care on patients' clinical outcomes.

## Providing Necessary Patient Education

Our clinical team had a patient who felt they didn't need help with their blood pressure but after reviewing their charts and past vital signs, it was apparent it was dangerously high.

Through consistent interactions, the care coordinator began educating the patient about appropriate blood pressure, how to check it regularly to inform their provider, and how to better comply with their medication. Now that the patient is better informed, they currently have improved blood pressure logs to show to their provider. This patient can better manage their blood pressure and their overall health due to the help of our care team and services.

## Improving Patient's Health Status

When a diabetic patient began their wellness journey with an A1c level of 12.9, it was noted that their diabetes management and education needed to be improved. After working with one of our nurses for three months, the patient's A1c vitals started to decline and within a year, they had gotten it down to 5.8. This outcome reduced the patient's health risks such as losing their eyesight, arm or leg.

Additionally, their overall cardiac health improved by interacting with one of our nurses every month. This is because the patient received additional education on diet and exercise as well as how to make positive lifestyle changes to better manage their chronic conditions.

## Helping Patients Reach Health Goals

After our nurses interacted with a patient who lives with COPD, they found her goal was to spend less time using her supplemental oxygen. It was then our team developed a plan with her by discussing what her triggers for COPD were, what weather situations she needed to avoid, and how to become compliant with her medication. After participating in pulmonary therapy, taking rest periods, and grouping her activities together, she found herself rarely using the supplemental oxygen.

# Connecting with a Strategic, Trusted Partner

When deciding on whether to implement a virtual care program, it may be helpful to consider collaborating with an experienced and trusted partner. This connects you to a team that can seamlessly act as an extension of your practice while avoiding disruption to your workflows and maximizing results.

A strategic partner should also be “just as motivated as you to achieve positive outcomes, support you throughout the implementation process, and be an expert resource in challenging situations,” according to the Telehealth Implementation Playbook.<sup>1</sup>

Without proper guidelines and implementation, introducing new virtual care programs can be a challenge. Discuss your expectations of the program and the barriers you feel you may face if you were to adopt it on your own with your potential partner. An experienced partner should know how to navigate these challenges and make launching these solutions easier for you. This way, you can focus on your patients’ care.

AMA’s Remote Patient Monitoring Implementation Playbook recommends evaluating and partnering with possible vendors that will enable your organization’s goals.<sup>2</sup> A vendor who is worthy of a long-term partnership will ensure you have:

- An experienced and reliable resource in disease states and challenging situations.
- An end-to-end solution that provides support throughout the implementation process, enrollment, running of the program, and billing.
- A partner who is equally motivated as you to achieve a successful outcome.



## Sources

1. American Medical Association Playbook, 2020. | 2. American Medical Association Article, 2021.

Finally, when evaluating partnerships that could be the right fit for your practice, it's important to consider the following elements from the American Medical Association<sup>1</sup>:

**Clinical Validation:** Does this vendor have documented clinical outcomes or published peer-reviewed research?

**Customer Service:** Can they offer any support to your practice both during and after program implementation? This can include patient education, data analysis, and technical support.

**Usability:** What is the user experience like for both patients and the care team? Can they offer ease of billing for patients and practices or workflow assimilation?

**Security:** Can the partner offer security such as supporting compliance with HIPAA rules, transparency on collected data use processes, and in-platform consent capabilities?

**Information Technology:** Can the solution integrate with your EHR and capture data that is important to the care team and patients?

**Business:** Can this partner have an impact on the program's ROI? Does this partner have the expertise in offering virtual care to your specialty and the knowledge of federal requirements?



If you're looking for a partner, look no further than Wellbox. 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 patients.

**Contact us today for a free population health analysis.**

#### Sources

1. American Medical Association Playbook, 2020.

## Summary

In conclusion, virtual care solutions such as Chronic Care Management, Principal Care Management, Remote Patient Monitoring, Annual Wellness Visits, and Medication Management can be successfully leveraged for patient populations living with diabetes, heart disease, and lung disease to:

- Extend patient access to care and improve self-management.
- Increase patient engagement and compliance.
- Improve clinical and financial outcomes.



## 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.
- Reducing the negative impact of chronic illness on our healthcare system.

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