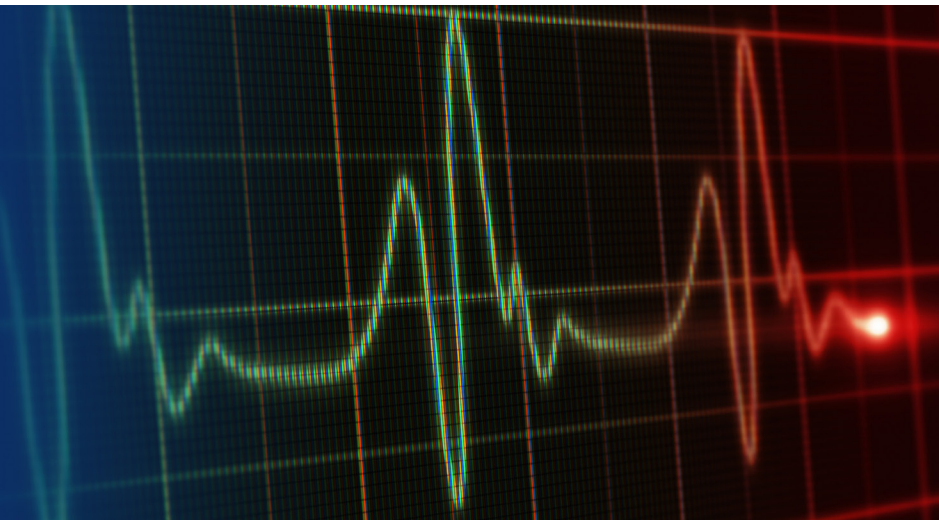# Improving Congestive Heart Failure Care for Providers and Patients

CHF Populations

- Total direct medical costs were estimated at $30.7B in 2012 and are projected to increase by ~127% to $69.7B by 2030

- Heart failure will affect 46% of the US population

- Medicare beneficiaries have the highest readmission rate attributed to CHF

- Patient-generated health data can influence effective healthcare through RPM

- Surveillance for biometrics and mental health proactively benefit CHF treatment

- Symptoms of depression are about three times more common in patients after an acute heart attack than in the general population

- Antidepressive treatment and focus on mental well-being has shown improvement in quality of life

Over 6.2 million people in the United States are diagnosed with heart failure, with attributed risk to obesity, diabetes, and unhealthy lifestyles involving tobacco, high-sodium diets, and inactivity.

Heart failure is a shared experience and the effects of CHF start unknowingly before diagnosis. Individuals who have heart failure suffer physical distress from fatigue, swelling, shortness of breath, difficulty breathing, and sleep problems. Psychologically, both patient and family can experience feelings of hopelessness from burdens of medication adherence, physical limitations, and a complex coordination of treatment routine and lifestyle change.
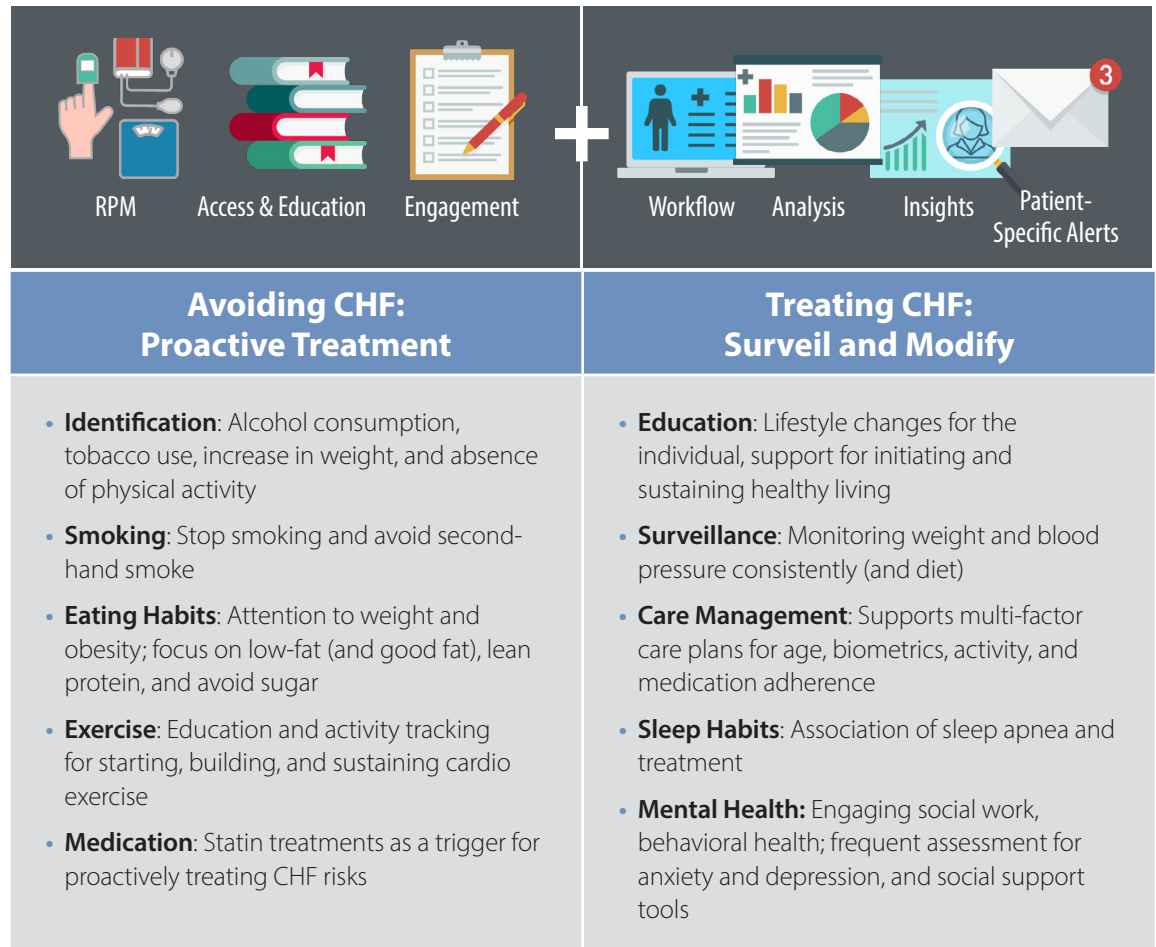
Treatment Approaches

Avoidance

Wellness and attention to the whole health of an individual is essential to reducing risk for many conditions. Proactive engagement to support healthy eating, activity, and lifestyle can be facilitated systematically to any population through virtual health and engagement tools. Reinforcement of proactive wellness through surveillance, education, and support (social, in-person, and systematic) is vital to sustaining healthy behaviors that reduce the risk of CHF.

Sustained Engagement

Delivering physical, psychological, and treatment management through patient engagement and access to care can result in improved overall health. Utilizing virtual health tools like remote patient monitoring, intelligence-powered care plans, and assessments simplify the rigor of treatment across the spectrum. The use of these tools in concert with care management enable quality social and care support structure for health sustainment.

How Zyter Helps

| RPM | Access & Education | Engagement | | Workflow | Analysis | Insights | Patient-Specific Alerts |

Avoiding CHF: **Proactive Treatment**	**Treating CHF:** **Surveil and Modify**
• **Identification**: Alcohol consumption, tobacco use, increase in weight, and absence of physical activity • **Smoking**: Stop smoking and avoid second-hand smoke • **Eating Habits**: Attention to weight and obesity; focus on low-fat (and good fat), lean protein, and avoid sugar • **Exercise**: Education and activity tracking for starting, building, and sustaining cardio exercise • **Medication**: Statin treatments as a trigger for proactively treating CHF risks	• **Education**: Lifestyle changes for the individual, support for initiating and sustaining healthy living • **Surveillance**: Monitoring weight and blood pressure consistently (and diet) • **Care Management**: Supports multi-factor care plans for age, biometrics, activity, and medication adherence • **Sleep Habits**: Association of sleep apnea and treatment • **Mental Health:** Engaging social work, behavioral health; frequent assessment for anxiety and depression, and social support tools

Overcoming Access to Care Challenges

The ability to provide access to CHF care can depend on multiple facets of financial, operational, and value-based influencers. A patient's ability to access care, sustain it, and improve their quality of living is a direct outcome of those influencers.

Financial – Those who can benefit most from remote patient monitoring devices (DME, OTC, and wearables) often cannot afford them. As reimbursement may be available through Medicare, it is important for providers to understand all financial aspects of supporting a large RPM program prior to launch.

Operational – Providers understand the importance of RPM and telehealth, but care management staff is not sized to handle increased patient cohorts. Integration with the EMR is essential for treatment in a longitudinal record, but RPM data and insights are not easily actionable without requiring more time spent using technology.

Value-Based – Value-based care models are incentivized to demonstrate and sustain health outcomes. Small to large, rural to urban, health care's mission is to foster improved health; without easy-to-use technology and devices, dismantling access disparities, and sustained patient engagement, "quick wins" are just as quickly lost.

Zyter helps solve these challenges to create access to care for treating CHF through:

- Virtual technology and services across the healthcare spectrum
- EHR integration and actionable data for the provider and care team
- Reducing the number of tools and "clicks" so staff can spend more time treating patients
- Linking value with risk mitigation, health outcomes, and decreased expense (such as reducing avoidable ED visits and readmissions)
- Supporting behavioral change in patients through educational materials and easier access to care as well as providing virtual support, alerts and reminders to physicians

"Providers benefit from system-analyzed patient-generated data and care plans to direct treatment, reduce decline or exacerbations with heart-health without increasing time spent analyzing or working with limited data from only office/emergency department visits.

Ultimately, patients desire to be connected to their caregivers and providers, instilling an assurance their health is a priority."

"What is Clinical Empathy?", National Center for Biotechnology Information

Patient Access to Care. Improved by Zyter.

Zyter ships one or more pre-configured wireless devices to the patient's home, outfitted with a simple on/off button. The blood pressure cuffs and weight scales are easy to use for patients of all ages and no technical knowledge is required. As the majority of devices are LTE-enabled, there is no need to connect them to Wi-Fi. All the patient has to do is turn on the Zyter device and follow the simple instructions in the user guide.
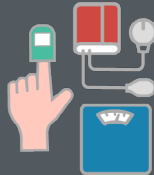
Zyter's action and care plans are easy to access on the app. Understanding activity, nutritional behaviors, and psychological and biological changes are essential for patients with congestive heart failure. Providers use custom or Zyter assessments to continue engaging patients without overwhelming them.

Zyter's mobile app displays the most recent biometric results and date of each reading, as well as activity and nutrition from synced wearables. Patients can "Take a Health Exam" or "Schedule a Visit" from the app, and if necessary, securely chat with their physician. If the healthcare organization's EHR is integrated with Zyter, visit summaries, medication lists, health conditions, and allergies can be displayed.

Zyter Telehealth creates access to care with secure video for patients, providers, care teams, caregivers, and support services. Along with remote patient monitoring (RPM), Zyter Telehealth provides real-time imaging, biometrics, and virtual evaluation

Zyter is continuing to innovate with health behavior reinforcement intelligence, using badges, reminders, and motivational messaging to help each patient with their personal health experience.

Zyter makes it easier to understand every patient as a unique individual. Zyter uses personalized care plans for RPM surveillance and notifications so the provider and team can customize what patients need to know when they need to know it.

Personalized Care. Delivered by Zyter.

Zyter integrates with the provider practice, hospital, and health system EHR. This makes it easy to provide access and facilitation for referrals, patients, and provider-to-provider interactions. The Zyter app can be embedded using iFrames for in-context, actionable treatment for patients being remotely monitored or needing telehealth services.

Timely alerts, clinical notes and references, urgent care and scheduled video visit flexibility within the provider and care team workflows boosts efficiencies so care teams can spend more time with patients.

Zyter technology makes virtual health data specific to how the provider needs to treat the patient. RPM biometrics are surveilled based on patient-specific thresholds, creating a unique care plan that can be modified as treatment progresses. Results are easily accessed in the EHR and the embedded Zyter provider app for ease-of-use.

Action plans, care plans, important numbers, and medication instructions are always available for the patient on their Zyter app. Providers can easily share educational content, social support direction, activity, and nutritional guidance, as well as health behavior content.

A vital component of achieving and sustaining value-based care is system-generated insights from RPM, patient health data, assessments, and clinical protocols. Providers using Zyter RPM with care management can gain operational efficiency over any demographic of population as they expand scale, interact with a health system, and establish a greater understanding of a patient's health behavior, disparities, and support needs.

Zyter provides support in understanding virtual/telehealth reimbursement and technology to help providers maximize their financial investment through engagement metrics and analysis.

Your Clinical Partner

Zyter is your clinical partner for improving and protecting health. We understand the healthcare delivery needs of doctors, nurses, and care teams, and can help your organization deploy value-based services to improve outcomes and lower cost.

For More Information

To learn more about Zyter Telehealth and RPM or arrange a product demonstration, please contact **+1 (301) 355 7760**, **sales@zyter.com** or visit **www.zyter.com/healthcare**

About Zyter

Zyter delivers a wide range of cloud-based, software as a service (SaaS) digital health products for providers, payers and patients that span telehealth, home health and remote patient monitoring, as well as care, utilization and population health management. In 2021, Zyter acquired Casenet®, LLC and together the two company's products are used to manage healthcare for 11% of the U.S. population. Zyter's products improve clinical operations and patient outcomes while reducing healthcare costs by enhancing interoperability, communication and collaboration. The company's 5G-ready platform also supports IoT/smart technology and thermal imaging solutions. In 2021, the company won more than 105 awards for its products including Best Health Care and Medical Innovation; The Most Innovative Digital Health Startup; Best Product and Best Technology. Founded in 2017, the privately-held company is based in Rockville, Md. For more information, please visit **www.zyter.com**.