The death of Elizabeth Taylor from heart failure has drawn attention to this common cause of death in the world, despite her undoubtedly getting the best care available.

Cardiovascular disease is the leading cause of death and a leading cause of morbidity in the western world. One of the major forms of that morbidity is heart failure, a very complex clinical syndrome involving impaired function of the main pumping chamber of the heart. This condition results in the organs and tissues being unable to get the oxygen and nutrients they need. Consequently, the patient may have symptoms of shortness of breath, fatigue and lack of energy. In some patients, the inability of the left ventricle to relax properly between beats also impairs its overall function. In the United States, heart failure affects nearly 5 million people of all ages, though dominantly in the older population which is an important consideration as baby boomers age. 400,000 new heart failure diagnoses are made annually, and it is responsible for more hospitalizations than all cancers combined and is a leading cause of hospital admissions.

As our population ages, we expect heart failure to become even more common. The most common causes for heart failure are those conditions that injure the main pumping chambers of the heart. These include coronary artery disease that results in heart attacks that damage heart muscle. Often, several smaller heart attacks can accumulate enough damage to globally impair heart function to the point of producing heart failure. Uncontrolled diabetes can also contribute to damaging of the coronary arteries, further compromising their ability to maintain the heart muscle. Wear and tear diseases like uncontrolled high blood pressure is a major cause of heart failure in America, especially in those who do not have ready access to medical care. Since high blood pressure has been called the “silent killer” since it produces no symptoms, it is a sinister culprit in the heart failure equation. Structural problems include significant heart valve leakage can overtax the heart’s reserves and may eventually produce heart failure. Some medications used in chemotherapy, some illicit drugs, some metabolic disorders and some infections, especially with certain viruses, can target the heart muscle with heart failure the result. In the past, the prognosis for heart failure was worse than for many cancers, with the often-quoted 50% mortality at 5 years. But all that has changed in the last twenty years. I hope it is clear from this overview that most of these entities are detectable and preventable.

A powerful tool that can be harnessed is true disease management, defined as a comprehensive, integrated approach to care based fundamentally on the natural course of a disease, with treatment designed to address the illness with maximum effectiveness and efficiency. The emphasis is on preventing the disease and/or managing it aggressively where intervention will have the greatest effect. That is the exact definition I use and is the goal of disease management programs I am developing to aid healthcare programs intervene in heart failure.

Considerable evidence-based medicine data have been accumulated that have demonstrated that true heart failure disease management yields markedly improved patient outcomes as measured by decreased mortality, morbidity and rehospitalization with commensurate reduction in utilization costs and unexpected encounters. But the most important result is that prevention, early detection and intervention pay huge dividends for the patient. Consulting with a doctor is the first and most important step.

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