



CHAPTER 1

Is a heart failure program the right choice?

Your practice or hospital has been treating heart failure (HF) patients as long as you have been in existence. We now know some of the limitations of how we have treated HF in the past, and more effective ways to approach this disease have been identified. However, before proceeding with the effort and investment of setting up a new way of doing things, you will want to be sure that a formal HF program is right for your patients, your practice, and your community.

Is a heart failure program right for your patients?

Heart failure (HF) remains a challenging condition to treat. In fact, it is sometimes even a difficult condition to define. Nonetheless, HF remains a cardiac epidemic, afflicting 5 million Americans, with 500,000 new patients joining this cohort each year. It has taken some time for us to accept that HF is not the episodic disease that it at first seems. It is in fact a chronic, progressive disease punctuated by episodes of decompensation. While our initial clinical focus was on stabilizing a patient's hemodynamics during these decompensations, it has become clear that many therapies that reduce HF symptoms do not impact long-term prognosis. The pillars of HF therapy are now aimed at improving survival rather than simple symptom relief. Getting a patient on a regimen of evidence-based doses of the neurohormonal antagonists, though, is not easy. One is always fighting hypotension, hyperkalemia, the cardiorenal syndrome, and so on. The titration of the medical regimen does not end when target doses are achieved. As in many chronic diseases, patient management is characterized by ongoing up- and down-titrations as the clinical picture changes. It is difficult for a physician working alone to maintain the schedule of very frequent visits needed by the patient with advanced HF.

Getting a heart failure patient on a regimen of evidence-based doses of therapy is not easy

In addition, the value of patient self-care in HF is well established. In the brief encounters that patients have with physicians during an office visit, teaching a patient about sodium budgets, fluid budgets, and self-management of diuretics is very challenging, if not virtually impossible.

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In our program we say that the new math of HF is that $7 \times 1 = 0$, and $3 \times 3 = 2$. In other words, if we teach seven things to a patient once, he or she is likely to retain nothing. If, on the other hand, if we teach three things three times, we can expect most patients to remember two of them. Unfortunately, in the current healthcare environment, the pressure on physician time necessitates that this time be spent on activities that require the training and experience of a physician. Patient education is not one of those activities that can only be performed by a physician. Therefore it will always be a lower priority (than say, a cardiac catheterization or a transesophageal echocardiogram, which do require a physician), no matter how important education is to patient outcomes.

The use of heart failure programs has now risen to the level of national guidelines

The practical choice with which we are left is to provide incomplete care or to leverage physician resources by using nonphysicians. The latter is preferable, and the emergence of formal HF programs to meet this need is no longer new or unproven. In fact, the use of HF programs to deliver care has now risen to the level of national guidelines. The 2005 American College of Cardiology/American Heart Association guidelines give the highest level of recommendation to treating HF patients with formal HF programs [1]:

Multidisciplinary disease-management programs for patients at high risk for hospital admission or clinical deterioration are recommended to facilitate the implementation of practice guidelines, to attack different barriers to behavioral change, and to reduce the risk of subsequent hospitalization for HF.

The 2006 Heart Failure Society of America guidelines likewise support the use of HF programs [2]:

Patients recently hospitalized for HF and other patients at high risk should be considered for referral to a comprehensive HF disease management program that delivers individualized care....

The acceptance of the superiority of this new model of care represents an international paradigm shift. The 2005 update to the European Society of Cardiology HF guidelines also addresses not just the therapy to use in HF, but how to deliver that care [3]:

An organized system of specialist heart failure care improves symptoms and reduces hospitalizations and mortality of patients with heart failure.

While there is general agreement, then, that the preponderance of evidence supports the widespread adoption of HF programs, there are a number of specific approaches that have been put forward, none of which has

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proven to be the superior method of managing HF patients. Low-tech and high-tech telemanagement systems, hospital nurse case managers, home health HF nurses, and dedicated HF clinics have all met with varying degrees of success. In this book I will present my experience with my own programs and with others I have seen be successful. Other types of programs may also be effective, but I know firsthand that the methods presented here can improve patient outcomes.

Is a heart failure program right for you?

It is one thing to know the strengths and weaknesses of various approaches to HF care. It is quite another to know which approach will work for you. The premise of this book is that the most cost-effective and clinically effective way to treat chronic HF in adults is a formal HF disease management program. In spite of my personal enthusiasm for the disease management strategy, after talking with physicians across the country, I have learned that this approach will not work for everyone. You may be accustomed to being the sole caregiver for patients under your charge. The shift to managing an HF team that provides this care is a big step philosophically and emotionally. The skill set required is different than what I acquired in medical school and requires spending a considerable amount of your professional time being a program builder, a teacher, and an administrator. The physician still drives a disease management program. However, in the model I propose here, there are on average four patient contacts with non-physicians for every physician contact. In traditional models of care, all the responsibility ultimately rested on the doctors' shoulders. That is still true, but in the disease management model, much of the decision making is done, and much of the care is delivered, by nonphysicians. This makes some physicians very uncomfortable.

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A reasonable analogy here is the military. While the admiral carries ultimate responsibility, and it is his or her decision to move the fleet from point A to point B, the admiral doesn't physically steer the ship. Everyone knows the chiefs run the navy. The first "go/no go" decision in considering the establishment of your HF program, then, is to know yourself and your style of patient care. If you must be both the admiral and the chief, if you can only be comfortable if you control all aspects of a patient's care, it is unlikely that you will be happy providing that care in the setting

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of a disease management program. There may be (and are) randomized clinical trials demonstrating the benefits of HF programs. These trials mean nothing, though, if the model doesn't work for you.

I personally find that I function more effectively when supported by an HF team of nonphysicians. I recall trying to run an HF practice in one hospital totally on my own. It quickly became apparent that I couldn't use aldosterone antagonists such as spironolactone in that setting. Being swamped with all of the details of HF care, I was certain that I would be unsuccessful in monitoring potassium levels as frequently and diligently as prudence would dictate. I felt it was just a matter of time before a patient developed an avoidable episode of serious hyperkalemia. The Canadian experience with spironolactone bears out my concern. After the RALES trial established the benefit of spironolactone in HF, prescriptions for spironolactone in that country quintupled. Unfortunately, hospitalizations for hyperkalemia tripled, with deaths from hyperkalemia also increasing threefold [4]. I was sure that my experience would be the same. However, over time the program grew, and could support additional staff. Once I had HF nurses helping me, I developed an aldosterone antagonist treatment protocol for initiating and following patients on this therapy. Within months, I was comfortable placing patients on aldosterone antagonists, referring the patient to the appropriate HF nurse, and not giving the issue another thought. I am comfortable with the fact that when treating chronic disease, the chiefs run the navy. In fact, under my direction, the chiefs do a superior job running the navy.

Physicians who run all care through their own hands, by definition, limit the number of patients they can see and how often they can see them.

Acute illness is a different situation. As an interventional cardiologist, I know it has been extremely gratifying for me, when presented with an ill patient suffering from an acute coronary syndrome, to be able to draw on my training as a physician to assess the patient's problem, determine a course of action with clear therapeutic goals, and then to achieve those goals. With patients who are acutely ill, the physician personally provides the critical steps in patient care—in this case revascularizing the threatened myocardium. With chronic disease states, the situation requires a different clinical solution.

Physicians who insist that all care run through their own two hands, by definition, limit the number of patients that they can see and how often they can see them. They become, as we discuss later, the "growth-limiting

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resource." An HF disease management program should be customized to address the growth-limiting resource of a particular program. Physician time, expense, and availability are common growth-limiting resources. The HF care team leverages that scarce and expensive resource, essentially allowing the physician to concentrate on activities that truly require the training and experience of a physician, and to virtually be in many places at once. This is a critical function of the HF program. However, not being personally involved in every clinical decision represents a significant loss of control and the acceptance of a degree of uncertainty. If you are a physician who is uncomfortable relinquishing clinical decision making to other members of your team, you will likely not be successful in building an HF practice based on the disease management model. Likewise, if training staff to assume roles as physician extenders is not your strength, your program may struggle.

Without doubt, a critical piece of a successful HF program is the physician medical director. While much of this book will focus on the impact of the nonphysician component of the HF team, an HF program is much more likely to be successful if it is led by an enthusiastic and visionary medical director. There are many leadership roles in HF programs that are best accomplished by a physician. These include not only setting the program's medical style of HF care, but also overcoming the political and logistical challenges that all new programs face. In the absence of a physician committed to the task, I have found that it is difficult to establish a sustainable program, and as a result much time, effort, and money is wasted. Taking on this responsibility can be a difficult choice for the busy clinician. Beyond that, the medical director must be convinced that an HF program is the right solution for the local circumstances in which the program will exist. An important part of that decision is whether the medical director has the temperament for running such an endeavor. Physician, know thyself. If a disease management program is not a good fit for you, there are other solutions to delivering HF care. If, on the other hand, this model of care appeals to you, this book should be of help.

Is a heart failure program right for your community?

Each medical community is a little different. You are in the best position to know how a new HF program will be accepted. A cardiologist or hospital depending on referrals as a source of patients for the program needs to assess how the referring physicians will feel about physician extenders delivering so much of the day-to-day care. I must say that this was something of an issue when I started my first HF program. The situation today is more

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accepting than it was even a decade ago, but even today this is something that should figure into your decision whether to begin an HF program.

Further, whether establishing a program within a physician practice or a hospital, there are likely to be other stakeholders. A series of questions naturally arise. Considering the situation of a physician practice:

Will other partners turn over their HF patients to the program?

What will be the impact of the program on workflow in the office?

How long will the practice need to support the fledgling program until it is financially viable?

How much of a distraction will setting up the program be (training the staff, developing protocols, etc.)?

The local conditions will determine the sort of HF program that best suits your community. Resources are always finite and will determine whether you develop a comprehensive program or a “boutique” program that only meets specific needs, such as education or drug titration. Limitations on the time that the medical director can spend on this effort, or on the size of the physical facility, or fiscal restraints all determine the scope of your program. The question then becomes not just if an HF program is right for your community, but what type of program is aligned with the goals of your practice or hospital. Focusing initial efforts on the most pressing needs of the community (rather than duplicating services already available) and being realistic about what can be achieved have helped me be successful in my programs, whether in a private practice or hospital setting.

You are in the best position to know how a new HF program will be accepted in your community.

Once your program is established, patients appreciate the more intense education, evaluation, and follow-up they receive. Typically, patients become attached to the HF staff who spend so much time applying the $3 \times 3 = 2$ principle discussed above. Patients with advanced HF rightfully see their cardiac condition as a predominant health problem. The presence of HF has implications for many of a patient’s comorbidities (e.g., the selection of β -blocker or angiotensin receptor blocker, the use of nonsteroidal anti-inflammatory agents). Ultimately, the expertise patients perceive in your staff on such issues will make your patients the best ambassadors for your program, and community acceptance and appreciation of your efforts will follow. The most successful HF programs I have seen are prudent enough to never take the community for granted, working hard to keep referral sources, patients, and the community at large “in the loop.”

Summary

HF therapy is difficult and complex, and is best provided by many hands working in unison. The clinical efficacy of HF disease management is now accepted, and the approach has been incorporated into US and European HF guidelines. This is an effective delivery system of HF care for patients. That does not mean that an HF program will be universally accepted and successful. The decision to proceed with establishing such a program will be based on matching the particular features of a specific HF program to the temperament of the physician leading the effort, as well as the specific needs for HF care of the local patient and medical community.

References

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