Patients presenting to the emergency department with acute heart failure (AHF) pose a major health care problem [1]. Acute heart failure accounts for more than 1 million hospitalizations per year in the United States with an in-hospital mortality rate of 4.1% and a mean length of stay of 6.5 days. Whether due to inadequate in-hospital treatment, refractory disease, noncompliance with diet or medications, or comorbidities, there is a hospital readmission rate of 20% within 30 days and 50% during the next 6- to 12-month interval. Additionally, there is a 10% mortality rate at 30 days, which increases to 20% to 40% at 12 months [2].

Heart failure can occur in the setting of acute coronary syndrome (ACS) and acute myocardial infarction (AMI). Other chapters in this book focus on the primary care of these conditions (i.e., angioplasty/revascularization) and treatment of mechanical complications associated with AMI and heart failure. In this chapter, we will focus on the medical diagnosis and therapy of acute decompen-sated heart failure—both in the setting of ACS and in chronic heart failure patients with acute heart failure decompensation.

The American College of Cardiology and the American Heart Association (ACC/AHA) have recently published revised guidelines for the management of chronic heart failure in adults [2]. The European Society of Cardiology has also developed guidelines for chronic heart failure [3]. Both sets of guidelines focus on outpatient management of chronic heart failure; treatment options for acutely decompensated heart failure (ADHF) and new-onset heart failure are not addressed. To address this deficiency, we have developed a unified pathway for the management of patients presenting with AHF to the emergency department. This pathway is simple yet comprehensive and covers the entire spectrum of patient care, from the time of emergency department presentation through their admission and the discharge plan (Fig. 12.1).

This pathway does not describe new treatments for heart failure. Rather, it is an attempt to incorporate, in a user-friendly format, the keys to initial diagnosis and management of heart failure. This is followed by a comprehensive guideline to therapy with a goal of shortening length of stay (LOS) without compromising medical stabilization, optimal diuresis, and implementation of
Figure 12.1. Pathway for the evaluation and management of acute heart failure.