patients with chronic renal insufficiency, a small, nonprogressive increase in the serum creatinine concentration may occur with intensive blood pressure lowering. This generally reflects a hemodynamic response, not structural renal injury, indicating that intraglomerular pressure has been reduced. Blood pressure control should not be allowed to deteriorate in order to prevent the modest creatinine rise.

In diabetic patients, effective blood pressure control reduces the risk of cardiovascular events and death as well as the risk for microvascular disease (nephropathy, retinopathy). Various guidelines have been recommended for hypertension control in patients with type 2 diabetes (e.g., <140/90, <140/85, or <130/80 mmHg). One widely cited study, the Action to Control Cardiovascular Risk in Diabetes (ACCORD) clinical trial, failed to find superiority of intensive blood pressure lowering (<120 mmHg) over standard blood pressure control (<140 mmHg) in reducing the risk of the study's primary outcome (a composite endpoint of myocardial infarction, stroke, and cardiovascular death) in diabetic patients. However, that trial did demonstrate a significant reduction of stroke and left ventricular hypertrophy with more intensive therapy.

Guidelines establishing blood pressure targets for hypertension control continue to evolve. According to 2017 guidelines developed by the ACC/AHA, the recommended goal of blood pressure control for the primary and secondary prevention of cardiovascular disease is a blood pressure <130/80 mmHg, including patients with diabetes mellitus and chronic kidney diseases (Table 277-8). However, in hypertensive patients without elevated ASCVD risk, the clinical trial evidence is strongest for a target blood pressure of 140/90 mmHg. In contrast to other ACC/AHA recommendations that are based on randomized clinical trials, this guideline is primarily based on observational studies. Among older patients with isolated systolic hypertension, further lowering of diastolic blood pressure does not result in harm. Relatively little information is available concerning the risk-versus-benefit ratio of intensive antihypertensive therapy in individuals >80 years of age, and in this population, gradual blood pressure reduction to a less aggressive target level of control may