SIGNIFICANCE STATEMENT

Atrial fibrillation, the most common cardiac arrhythmia in adults with kidney disease, is linked with an increased risk of ischemic stroke and death in patients with dialysis-treated ESRD; less is known about outcomes associated with atrial fibrillation among patients with CKD who do not require dialysis. To evaluate whether development of this arrhythmia is linked with other important cardiovascular outcomes among nondialysis patients with CKD, the authors studied a large, well characterized, longitudinal cohort of adult patients with CKD, finding that incident atrial fibrillation was independently associated with two- to five-fold increased risks of developing subsequent heart failure, myocardial infarction, stroke, or death. These findings have important implications for cardiovascular risk reduction in patients with CKD.