

RECENT DECREASE IN DEATH RATES AMONG DIALYSIS PATIENTS: Peer Kidney Care Initiative (CDRG and the Chief Medical Officers of 13 US Dialysis Providers), Minneapolis, MN

The rate of death in US dialysis patients has historically exceeded the rate of death in the general population. Because the majority of patients are seen by outpatient dialysis providers three times per week, risk reduction likely depends on continuous quality improvement in disease management by dialysis providers. We assessed trends in rates of death among incident and prevalent patients treated in freestanding dialysis facilities between 1996 and 2011.

Data were ascertained from the Centers for Medicare & Medicaid Services End Stage Renal Disease database. For incident cohorts per annum, we identified patients with first outpatient dialysis within 3 months of chronic dialysis initiation and in a freestanding facility. For prevalent cohorts per annum, we identified patients undergoing dialysis in a freestanding facility on January 1. In both cohorts, we followed patients until recovery of renal function, kidney transplant, interruption of outpatient dialysis for > 3 months, or death; and maximum follow-up duration for each cohort was 1 year. Mortality rates were estimated without statistical adjustment for differences in case mix.

Among incident patients, mortality rates increased by > 10% between 1996 and 2003, from 27.8 to 30.6 deaths per 100 patient-years (PY). From 2003 to 2011, the trend reversed: rates decreased by > 15%, from 30.6 to 26.0 deaths per 100 PY. Among prevalent patients, mortality rates were unchanged between 1996 (deaths per 100 PY, 22.4) and 2003 (22.5). In contrast, mortality rates decreased by > 19% from 2003 to 2011, from 22.5 to 18.3 deaths per 100 PY. By comparison, crude and age-adjusted mortality rates in the US population decreased by only 4.3% and 12.1%, respectively, between 2003 and 2011.

Since 2003, the rate of death among dialysis patients in freestanding facilities has decreased markedly and more rapidly than in the general population, but the rate remains high and further progress is needed.