

CHANGING CHARACTERISTICS OF INCIDENT HEMODIALYSIS PATIENTS, 1995-2005.

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Due to increasing prevalence of diabetes and obesity in the general population, the lower cardiovascular death rates and changes in quality of and access to predialysis care, the surviving chronic kidney disease (CKD) population reaching ESRD may have changed. However, few studies have examined changing characteristics over time. This study aimed to evaluate changing demographic characteristics, comorbidity, and biochemical markers of incident hemodialysis (HD) patients from 1995 to 2005.

This retrospective cohort study included all incident HD patients who initiated dialysis between January 1, 1995 and December 31, 2005. All patient information at dialysis initiation was obtained from the Centers for Medicare & Medicaid Medical Evidence Report (Form CMS-2728). Quantile and logistics regression was used to test the significance of changes, which was measured by *p*-values of the slope parameter.

The incident HD population increased from 59,071 patients in 1995 to 97,516 in 2005. All the selected characteristics listed in the following table increased from 1995 to 2005 ($P < 0.0001$) except for serum albumin and serum creatinine. The incident HD population became significantly older and more obese from 1995 to 2005. Diabetes remained the main cause of ESRD and hypertension was the most prevalent listed comorbid condition over time. ESRD patients initiated dialysis at higher levels of estimated glomerular filtration rates (eGFR); median serum creatinine value correspondingly decreased over time. Median hemoglobin consistently reached 10 g/dL and above after 2002. Awareness of these changes in the incident HD population is important for appropriate interpretation of trends in outcomes and costs.

Characteristics	1995	2005	Characteristics	1995	2005
Age	60.8	63.2	Hemoglobin	9.2	10.0
Men	52.6	55.6	Albumin	3.2	3.1
Whites	61.8	64.7	Creatinine	8.0	6.0
ESRD cause: DM	41.8	45.1	eGFR	6.9	9.4
Diabetes	32.9	51.9	Median BMI	23.9	26.6
Hypertension	51.3	82.0	BMI ≥ 30	12.7	32.2