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CHARACTERISTICS OF PATIENTS WHO TRANSITION BETWEEN TWICE- AND THRICE-WEEKLY

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A majority of patients treated with hemodialysis (HD) receive 3 dialysis treatments per week. However, clinical and patient circumstances may sometimes allow patients to transition from thrice weekly HD to twice weekly, or vice versa. Patients with substantial residual kidney function may prefer a gradual transition from less-frequent HD to thrice-weekly (incremental HD); whereas other patients may prefer to lower treatment frequency from thrice- to twice-weekly (decremental HD). Compared to incremental HD, less is known about the characteristics of patients undergoing decremental HD.

Among patients dialyzing at a large US dialysis organization (2007-2011), we retrospectively identified 1120 decremental and 569 incremental HD patients who successfully transitioned between twice-weekly and thrice-weekly schedules within 3 months. Clinical characteristics were compared between groups using standardized differences.

	Decremental HD (n=1,120)	Incremental HD (n=569)	SD
Age, year	68±14	67±14	0.07
Male, %	53	54	-0.02
ESRD reason, %			
Diabetes	35	45	-0.19
Hypertension	32	32	0.00
Glomerulonephritis	12	8	0.11
Polycystic kidney disease	2	2	-0.01
Other reasons	19	13	0.17
Comorbidities, %			
Diabetes	57	67	-0.19
Hypertension	51	54	-0.05
Atherosclerotic heart disease	19	19	-0.01
Congestive heart failure	35	47	-0.24
Cerebrovascular disease	1	2	-0.03
Dementia	1	1	-0.03
Depression	2	2	0.02
History of cancer	3	3	0.03

There were no significant between-group differences in age (68±14 vs 67±14 years; standardized differentiation [SD], 0.07), gender (53% vs 54%; SD, -0.02), race or insurance status. The prevalence of diabetes and congestive heart failure were lower among decremental HD patients than incremental HD patients (57% vs 67%, SD -0.19; 35% vs 47%, SD -0.24; respectively). Both groups had a similar prevalence of hypertension (51% vs 54%, SD -0.05), atherosclerotic heart disease (19% vs 19%, SD -0.01), cerebrovascular disease (1% vs 2%, SD -0.03), dementia (1% vs 1%, SD -0.03), depression (2% vs 2%, SD 0.02), and malignancies (3% vs 3%, SD 0.03).

In conclusion, decremental HD patients have lower prevalence of diabetes and congestive heart failure compared to incremental HD patients. Additional studies are needed to further elucidate the reasons for less frequent hemodialysis, and to determine the outcomes associated with it.