

# Changes in Medicare coverage after kidney transplant

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## Introduction

- Medicare coverage for kidney transplant recipients in the US ends 3 years posttransplant, except for those aged  $\geq 65$  years or disabled.
- This policy assumes that most recipients recover sufficiently after 3 years to reenter the workforce and gain employment-based insurance coverage.
- SRTR sought to describe posttransplant insurance patterns during the first 5 years posttransplant.

## Methods

- SRTR kidney transplant data, 1998-2008, linked to the United States Renal Data System Medicare payer sequence file and the Medicare Enrollment Database, resulting in 156,282 linked transplants.
- Analysis was stratified by age  $<62$  or  $\geq 62$  at transplant; the latter are entitled to Medicare coverage at 3 years posttransplant due to age; the former are not.
- Of recipients aged  $<62$  at transplant, we further studied subgroups who were Medicare covered but lost coverage or retained coverage at 3 years.
- Records were censored at earliest of graft failure or death.

## Results

- 78% of adults aged  $\geq 62$  at transplant were Medicare primary payer (MPP) at 36 months posttransplant, as were 74% at 5 years; 1% had no Medicare coverage at 5 years.
- MPP coverage declined from 64% at 36 months to 39% at 37 months posttransplant; percentages with no Medicare coverage rose from 13% to 42%; 35% remained MPP at 5 years.
- Any Medicare coverage was classified as Medicare. Recipients who retained coverage were likelier to have longer ESRD duration at transplant, receive a deceased donor kidney, have less education, and be a nonprimary solid-organ transplant recipient (Table 1; all  $P < 0.0001$  by Chi-square test).
- 92% of recipients who did not lose Medicare immediately claimed disability. The percentage increased from 85% for 1998 transplants to 94% for 2008 transplants.

Table 1. Characteristics of Medicare-covered age  $<62$  transplant recipients, by loss of Medicare after 3 years posttransplant\*

		Lost Medicare (%)	Did Not Lose Medicare (%)
ESRD Years at Transplant	0	52.4	47.6
	>0 to 1	41.5	58.5
	>1 to 2	34.0	66.0
	>2 to 4	31.0	69.0
	>4 to 8	26.4	73.6
	>8	24.6	75.4
Kidney Donor Type	Living	41.0	59.0
	Deceased	29.2	70.8
Primary Cause of ESRD	Diabetes	25.6	74.4
	Hypertension	31.0	69.0
	Glomerulonephritis	39.6	60.4
	Cystic Kidney Disease	44.4	55.6
	Interstitial Nephritis	38.8	61.2
	Other/Unknown	31.4	68.6
Education Level	Grade school or less	29.1	70.9
	High school or GED	29.5	70.5
	Attended college or tech. school	34.2	65.8
	Associates or bachelor's degree	44.4	55.6
	Post-college degree	53.1	46.9
Prior Solid-organ Transplant	Yes	21.9	78.1
	No	36.0	64.0
Total		34.0 (n=31,341)	64.0 (n=60,774)

\*All differences significant at  $P < 0.0001$  by Chi-Square test

Figure 1. Medicare Coverage of Kidney Transplant Recipients, 1998-2008

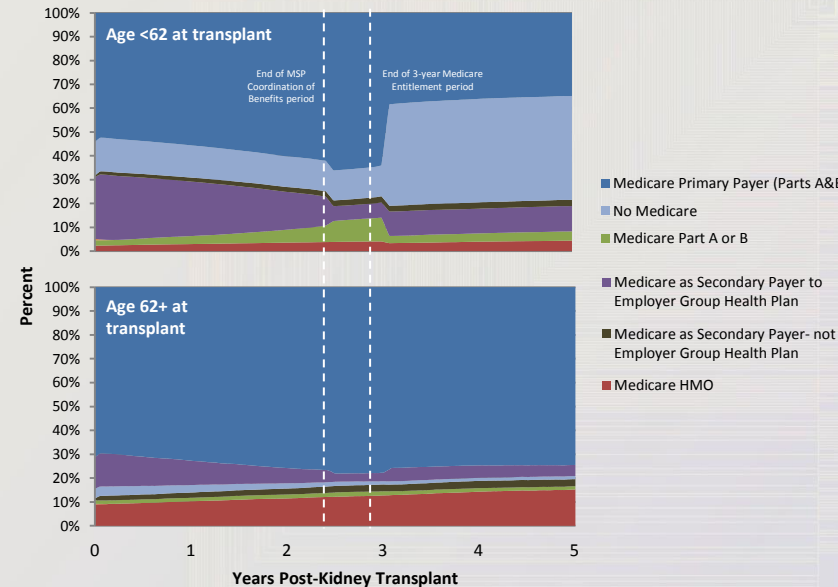
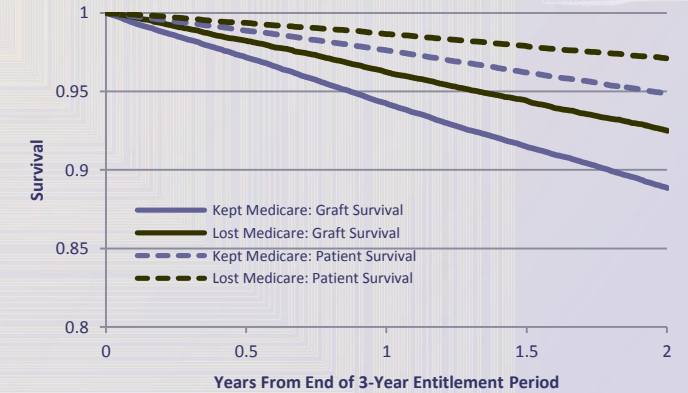


Figure 2. Unadjusted Patient and Graft Survival After End of 3-Year Posttransplant Entitlement Period



## Conclusions

- MPP is the major source of insurance coverage for recipients aged  $\geq 62$  years and a significant source for those aged  $<62$ , accounting for 99% and 56% of coverage at 5 years, respectively.
- The characteristics and allograft survival of recipients aged  $<62$  at transplant who retain Medicare coverage at 3 years differ significantly from those who lose it (Table 1, Figure 2).
- After adjustment for age, race, sex, and other medical variables and the covariates in Table 1, recipients age  $<62$  at transplant who lose Medicare coverage at 3 years posttransplant still have a significant survival advantage at 5 years.
- The reason for this difference is unknown; however, because disability was claimed by 92% of those who retained Medicare, it is likely related to wellness and to ability to obtain employer-provided private insurance.