

Response to Bui et al, “Patient Functional Status at Transplant and Its Impact on Posttransplant Survival of Adult Deceased–donor Kidney Recipients”

Bertram L. Kasiske, MD,^{1,2} Nicholas Salkowski, PhD,¹ Andrew Wey, PhD,¹ David Zaun, MS,¹ Ajay K. Israni, MD,^{1,2,3} and Jon J. Snyder, PhD^{1,3}

We read with interest the article by Bui et al¹ on use of the Karnofsky Performance Scale (KPS) score in predicting posttransplant outcomes. The authors confirmed findings of others that functional status is an independent predictor of graft and patient survival after kidney transplant. However, they go on to suggest that the Scientific Registry of Transplant Recipients (SRTR) should include KPS scores collected by the Organ Procurement and Transplantation Network (OPTN) in its models reporting adjusted outcomes after kidney transplant in the SRTR program-specific reports.

We presented data on KPS scores collected by OPTN to the American Transplant Congress in 2012.² We found large transplant program-to-program variation in KPS score reporting among kidney transplant programs. The average scores at programs varied from a high of 99.2% to a low of 39.8%. This interprogram variation remained after adjusting program mean KPS for age, sex, race, and primary cause of kidney failure. Similarly, in their Table 2, Bui et al¹ show wide variability in reported KPS scores. For example, 13.8% of KPS scores were 100, which, according to KPS, indicates “normal, no complaints, no evidence

of disease.” All patients presumably had stage 4–5 chronic kidney disease, and hence classifying them as having “no evidence of disease” is inherently incorrect and illustrates the problems in current reporting of KPS scores by programs.

There were also unpublished examples of United States transplant programs ostensibly “gaming” KPS scores to improve their SRTR-reported, KPS-adjusted outcomes. In 2011, the Health Resources and Services Administration, which oversees transplantation in the United States, recommended study of KPS use in risk-adjustment models over concerns about gaming. SRTR data were reviewed by the SRTR Technical Advisory Committee in July of 2011, and upon committee recommendation, SRTR removed KPS scores from kidney risk-adjustment models due to concerns over consistency of their application across programs.

If there were a reliable, audited risk-prediction score for functional status, then it would make sense to include it as a covariate in SRTR models. However, this would require education of programs and audits of the data by OPTN that currently do not exist.

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¹ Scientific Registry of Transplant Recipients, Hennepin Healthcare Research Institute, Minneapolis, MN.

² Department of Medicine, Hennepin Healthcare, University of Minnesota, Minneapolis, MN.

³ Department of Epidemiology and Community Health, University of Minnesota, Minneapolis, MN.

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Correspondence: Bertram L. Kasiske, MD, Scientific Registry of Transplant Recipients, Hennepin Healthcare Research Institute, 701 Park Ave, Suite S4.100, Minneapolis, MN. (bkasiske@cdrg.org).

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