Health Insurance, Access to Care, and ESRD: An Intricate Web

Rajnish Mehrotra* and Larry Kessler†

*Kidney Research Institute and Division of Nephrology, and †Department of Health Services, School of Public Health, University of Washington, Seattle, Washington

In 2011, the incidence of treated ESRD in the United States was 357 per 1 million population; this incidence rate is higher than observed in almost every other country in the world. There are also significant disparities, such that the incidence of ESRD is substantially higher in blacks and Hispanics. Moreover, most patients newly diagnosed with ESRD are poorly prepared to begin RRT. Almost one third of patients starting maintenance dialysis have not received any nephrology care, and only 30% have received subspecialty care for >12 months.1 Less than 10% of patients with incident ESRD have had counseling by a dietitian, most are unaware of the possibility of being able to undergo dialysis at home, pre-emptive kidney transplantation is extremely rare, and a central venous catheter is used as a vascular access for the first dialysis treatment for 80% of patients starting in-center hemodialysis.1–3 These observations strongly suggest that the high societal burden of ESRD, racial disparities in the incidence of the disease, and inadequate preparation for maintenance dialysis stem, in part, from challenges in access to care by many vulnerable segments of United States society.

Lack of health insurance often limits access to care, and, as summarized in a report from the Institute of Medicine,4 “there is a chasm between the healthcare needs of people without health insurance and access to effective health care services.”4 However, to date, only a few studies have examined the link between health insurance and these specific access issues on the path to ESRD. This is particularly relevant because more than two thirds of new cases are attributable to diabetes and hypertension. These two chronic diseases have a long lag period before ESRD that should provide opportunities for implementing evidence-based renoprotective therapies and preparing patients for the impending need for dialysis. Consistent with this observation, the risk for progression to ESRD in individuals aged 18–65 years without health insurance participating in a community-based kidney disease screening program was 72% higher than among those with private insurance.5

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Correspondence: Dr. Rajnish Mehrotra, 325 Ninth Avenue, Box 359606, Seattle, WA 98104. Email: mehrotr@uw.edu

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Medicaid is a program funded jointly by the Federal and State governments to provide health insurance coverage to low-income Americans, a group at very high risk for progression to ESRD. In this issue of JASN, Kurella Tamura et al. examined the association between the proportion of nonelderly low-income population aged 20–64 years covered with Medicaid in any given state in 2000–2007 with the incidence of ESRD between 2001 and 2008. Taking on this analysis and asking these provocative questions is a significant contribution. The proportion of the low-income nonelderly population with Medicaid coverage ranged from 12% to 66%, and 10–percentage point higher coverage was associated with a 1.8% lower incidence of ESRD.

Although their observations support the argument that expanding Medicaid coverage may decrease the incidence of ESRD, such population-level ecologic analyses need corroborative evidence for possible causal pathways. Given that diabetes and hypertension are the most common underlying causes of ESRD, improved treatment for these conditions would be expected to have the highest impact and an important causal pathway to support the association of more generous state Medicaid coverage with a lower incidence of ESRD. In the only randomized study to have examined this issue, the Oregon experiment, 6387 adults were selected, according to a lottery drawing, to apply for Medicaid coverage, and 5842 were not selected. During the next 2 years, neither BP control nor glycated hemoglobin significantly improved with Medicaid coverage. Although these data from a small group of individuals from a single state with a small minority population during a short period of time cannot definitively exclude the health care benefits with expanded Medicaid coverage (generally or specific to ESRD), it does call for generating more evidence for possible causal pathways to explain the association with lower incidence of ESRD in the study by Kurella Tamura et al.

It is also important to consider that providing health insurance coverage via Medicaid does not guarantee access to care. From 2001 through 2008, Medicaid recipients were significantly more likely to have received nephrology care and have a functioning arteriovenous fistula or graft for hemodialysis than uninsured nonelderly adults but less likely than those with private insurance. There was no tangible benefit vis-à-vis getting waitlisted for or receiving a kidney transplant within 1 year of start of dialysis or in the probability of being treated with peritoneal dialysis. The inability to achieve the level of access to care available to individuals with private insurance may reflect the cumulative effect of limited access of Medicaid recipients to subspecialty care from low programmatic reimbursement rates and persistent socioeconomic barriers. For several measures studied in this analysis, the care received even by individuals with private insurance fell substantially short of what is considered to be optimal and illustrates the challenge faced by the nephrology community to improve the quality of care.

The study by Kurella Tamura and colleagues highlights the intricate web of health insurance, access to care, and ESRD. Their study is timely as a social experiment is unfolding in this country that will allow us to further examine the association between Medicaid coverage and health care outcomes. The Affordable Care Act, which was signed into law in 2010, expanded Medicaid coverage by establishing a minimum income eligibility level across the country (133% of federal poverty level) and guaranteed coverage for low-income adults without children. However, the Supreme Court judgment in 2012 made the Medicaid expansion optional for states, and to date, only about half the states are implementing this provision. Although more states are likely to expand Medicaid coverage in the future, this period of differential coverage will allow researchers to better quantify the improvements in access to care and health gains that may accrue to the most vulnerable segments of the population with the availability of health insurance. In the case of ESRD, we strongly recommend that detailed data also be collected concerning the intermediate markers or indicators, such as diabetes and hypertension control, to understand the nature of the impact of the provision of expanded coverage.

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REFERENCES

See related article, “State Medicaid Coverage, ESRD Incidence, and Access to Care,” on pages 1321–1329.