CAHPR CENTER FOR ADVANCING HEALTH POLICY THROUGH RESEARCH

School of Public Health BROWN UNIVERSITY

Evaluating the Impact and Consequences of the ESRD Treatment Choices (ETC) Model

Policy Brief

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Summary of the Issue

Kidney failure, a life-threatening condition that requires time-intensive dialysis treatments or organ transplants, disproportionately impacts the most socially disadvantaged communities in the US, such as racial and ethnic minority groups and those living in poverty.[1]

Evidence of racial, ethnic, and socioeconomic disparities in the use of at-home dialysis and the rate of transplant have been well documented for decades. For example, Black patients with kidney failure are 34% less likely and Hispanic patients were 31% less likely to initiate dialysis with peritoneal dialysis than White patients.[2]

In July 2019, the Trump Administration, through the Centers for Medicare & Medicaid (CMS), announced a new model of care for Medicare beneficiaries with chronic kidney disease, the End-Stage Renal Disease (ESRD) Treatment Choices (ETC) Model. The ETC Model was intended to encourage greater use of home dialysis and kidney transplants for Medicare beneficiaries with ESRD.[3] The model was intended for traditional Medicare beneficiaries and does not apply to those in Medicare Advantage.

About 30% of dialysis centers and kidney specialists in the U.S. were randomly selected to participate in a program in this model where they could either receive extra money or face financial penalties. The incentives or penalties, which in the first year vary between a 4% bonus and a 5% cut, are tied to how well their patients use home dialysis or get listed for a kidney transplant. These payment adjustments are set to gradually increase as the model progresses, reaching an 8% bonus and a 10% cut by the model's final year in 2027. These financial adjustments affect all Medicare payments for dialysis treatments.

The expectation for the ETC Model was that it would also provide additional support to health care providers who treat underserved patients, including those dually eligible for Medicare and Medicaid and beneficiaries eligible to receive assistance with prescription drug costs through the Part D program.[3] Prior research[4] has demonstrated that dialysis facilities that disproportionately serve populations with high social risk have lower use of home dialysis and kidney transplants, raising concerns that these sites may fare poorly in the payment model.

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[1] Koukounas KG, Thorsness R, Patzer RE, Wilk AS, Drewry KM, Mehrotra R, et al. Social Risk and Dialysis Facility Performance in the First Year of the ESRD Treatment Choices Model. JAMA [Internet]. 2024 Jan 9 [cited 2024 Mar 7];331(2):124–31. Available from: https://jamanetwork.com/journals/jama/article-abstract/2813775

[2] Weiner DE, Meyer KB. Home Dialysis in the United States: To Increase Utilization, Address Disparities. Kidney Medicine. 2020 Mar;2(2):95–7.

[3] The Centers for Medicare & Medicaid Services (CMS). ESRD Treatment Choices (ETC) Model [Internet]. The Centers for Medicare & Medicaid Services (CMS); Available from: https://www.cms.gov/priorities/innovation/innovation-models/esrd-treatment-choices-model

[4] Thorsness R, Wang V, Patzer RE, Drewry K, Mor V, Rahman M, et al. Association of Social Risk Factors With Home Dialysis and Kidney Transplant Rates in Dialysis Facilities. JAMA. 2021 Dec 14;326(22):2323.

Analysis of the ETC Model

The ETC Model has Shown No Effect on Outcome

The ETC model has gone under two CMS-led evaluations since the program's inception. In the first year, researchers reported that the ETC model did not lead to faster growth in home dialysis use in ETC-assigned areas, and there was no early impact on total Medicare Parts A and B payments per patient per month.

The second-year evaluation found that home dialysis grew similarly across ETC areas and led to an increase in home dialysis training, but did not shift ETC participants' behavior and saw no differences in Medicare payments per patient per month. The second-year evaluation also stated it did not reveal early detectable patterns of different effects of the model on underserved populations.[5]

The ETC Model Unfairly Penalizes Facilities that Serve High-Risk Populations

One aspect that has been missing in CMS's evaluations of the ETC models is whether they address issues of equity. Investigators at the Brown University School of Public Health aimed to examine the consequences of the ETC model on equity in kidney failure treatment. In their first study,[1] researchers assessed first-year ETC model performance and financial penalties among facilities that serve patients with high social risk compared with those serving populations with lower social risk. They found that in 2191 ETC-participating dialysis facilities, those serving higher proportions of patients who were non-Hispanic Black or Hispanic, living in a highly disadvantaged neighborhood, or were uninsured or covered by Medicaid at dialysis initiation *received lower performance scores* and had *experienced more financial penalization*,[1] driven primarily by lower use of home dialysis. The magnitude of the ETC model's 5% to 10% penalty on all Medicare reimbursements may threaten the solvency of these safety-net centers as the model continues. Their closures would likely have harmful consequences, including extended travel and missed sessions.

A second study aimed to determine if the ETC model influenced the use of home dialysis and kidney transplants during its first two years of implementation. Analyzing 724,406 traditional Medicare beneficiaries with kidney failure, the study found that there was *no significant difference in the use of home dialysis or kidney transplant* between those treated in regions randomly assigned to the ETC model and those treated in control regions.[6] This provides further evidence that the ETC payment model has shown little impact in further promoting the uptake of home dialysis and kidney transplants among patients with kidney failure.

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[5] The Centers for Medicare & Medicaid Services (CMS). End-Stage Renal Disease Treatment Choices (ETC) Model Evaluation Findings Through December 2022 [Internet]. The Centers for Medicare & Medicaid Services (CMS); Available from: https://www.cms.gov/priorities/innovation/data-and-reports/2024/etc-2nd-eval-rpt-aag

[6] Koukounas KG, Kim D, Patzer RE, Wilk AS, Lee Y, Drewry KM, et al. Pay-for-Performance Incentives for Home Dialysis Use and Kidney Transplant. JAMA Health Forum [Internet]. 2024 Jun 30 [cited 2024 Jul 2];5(6.9):e242055. Available from: https://jamanetwork.com/journals/jama-health-forum/fullarticle/2820645

Recommendations

- CMS could consider defining a broader construct of social risk rather than exclusively focusing on eligibility for Medicaid or low-income subsidies
- CMS could revise the proposed stratum cutoff to be the median proportion of patients who are dually insured or low-income
- Since the ETC model has shown no impact on outcomes regarding participants' behavior or Medicare payments and has disproportionately impacted facilities that treat high-social risk, CMS should consider whether or not the program is worth continuing.
- CMS could consider providing additional resources to facilities, particularly those that treat patients with higher social risk, to help overcome structural barriers preventing the uptake of home dialysis or kidney transplants.

Conclusion

Kidney failure is a life-threatening condition that impacts many individuals across the United States, especially the most socially disadvantaged communities, such as racial and ethnic minority groups and those living in poverty. Although the ETC model attempts to bridge that divide, the evidence of racial, ethnic, and socioeconomic disparities continues to increase. Our research shows that the ETC Model disproportionately impacts facilities that serve patients with higher social risk through lower performance scores and increased financial penalization due to lower use of home dialysis. On top of that, we've found that providers enrolled in the experiment aren't moving more patients to home dialysis or transplants. Because of this, CMS should strongly consider ways to improve the ETC model to address equity in kidney failure treatment or to discontinue the ETC model in favor of other strategies to increase home dialysis and transplantation and reduce disparities in these treatments.