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Tech Use for Diabetes Management Shows a Significant Racial Gap

Fewer Black patients than white patients with type 1 diabetes use high-tech tools to self-administer insulin and monitor their glucose.

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Today, more Medicare patients with diabetes utilize devices such as insulin pumps and continuous glucose monitors to manage their blood sugar. However, recent study findings published in the Journal of Clinical Endocrinology & Metabolism show that despite an increase in the use of these tools from 2017 to 2019 (thanks to coverage changes), the gap widened between white Medicare beneficiaries with type 1 diabetes who use such technology and their Black peers who don't, reports MedPageToday.com.

For the study, researchers from Medtronic Diabetes in Northridge, California, assessed information from Medicare Limited Data Set files varying from one in 2017 consisting of 16,114 Medicare beneficiaries to one in 2019 spanning 13,796 individuals. (Almost 80% of these Medicare patients were white, and about 15% were Black.)

In addition, scientists evaluated 7% of Medicare beneficiaries of other races, including Asian, Hispanic and North American Native populations.

Between 2017 and 2019, insulin pump and continuous glucose monitor usage rose in all population groups. However, insulin pump use increased from 14% to 18% among white beneficiaries but rose only from 3.8% to 4.6% among Black Medicare patients. In 2019, 57% of white beneficiaries used a pump, compared with 33.1% of Black beneficiaries and 30.3% of those from other groups.

"This study highlights the complexity of the causes of health disparities in diabetes," said Robert Vigersky, MD, one of the study authors, in a statement. "Previous studies in non-Medicare beneficiaries point to socioeconomic status as the key driver of unequal adoption of diabetes technology, but our study shows many other contributing factors."

The researchers also suggested that the lack of standardized clinical guidelines for prescribing diabetes technology might cause providers to choose only more compliant patients, for example, or use other potentially biased criteria for prescribing.

Furthermore, the researchers added, “These selection criteria for insulin pump prescription may include a minimum number of daily blood glucose tests, a minimum number of annual patient visits, a certain HbA1c [a measure of average blood sugar levels] threshold and a minimum duration of diabetes, none of which are evidence-based criteria. Consequently, patients from racial and ethnic minorities may be excluded from consideration by the bias of ’gatekeepers’ to therapy access.”

Not enrolling enough people from minority groups in clinical trials also prevented their access to diabetes management technology, the researchers continued.

Key limitations of this study include the omission of the costs of insulin pumps and continuous glucose monitors, lack of patient health outcomes and the exclusion of individuals on long-term oral meds to lower their blood sugar levels.

To learn more about diabetes management gadgets read “Medical Devices, Not Drugs, May Become the Gold Standard in Diabetes Treatment.”
