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Title

Continuity in Medications Used by Adults with Diabetes in the United States, 2005-2019

Priority 1 (Research Category)

Diabetes and endocrine disease

Presenters

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Abstract

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Context: Longitudinal surveillance of diabetes treatment may identify opportunities for policy and practice reforms.

Objective: Describe trends in longitudinal utilization of glucose-lowering medications and if indicated, blood-pressure and lipid-lowering medications, for United States (US) adults with diabetes.

Study Design and Analysis: We analyzed data from the Medical Expenditure Panel Survey (MEPS). MEPS follows participants in sequentially staggered two-year panels from 2005 through 2019 that provide both serial cross-sections and longitudinal follow up.

Population Studied: All MEPS participants aged 18 years and older with diabetes for both years.

Outcome Measures: For each of glucose-, blood-pressure, and lipid-lowering medications types separately, we categorized any use of medications in YR1 and YR2 as: continued use of some medication in both years; introduced newly prescribed medications in YR2 after no medication use in YR1; inconsistent use of some historically prescribed medication in one of two years; and no use in any medications in both years.

Results: The percentage of participants who never used any glucose-lowering medications over the two years followed in MEPS increased from 8.1% (95% confidence interval [CI], 6.0 to 10.1) in 2006 to 12.9%

(95% CI, 10.9 to 14.9) in 2019, as did the percentage of participants who inconsistently used any historically prescribed medications in only one of two years, from 3.3% (95% CI, 1.9 to 4.7) in 2006 to 7.1% (95% CI, 5.6 to 8.6). For blood-pressure-lowering medications, inconsistent use of some historically prescribed medications increased from 3.9% (95% CI, 1.8 to 6.0) in 2006 to 8.0% (95% CI, 5.9 to 10.0) in 2019. A third of participants indicated for lipid-lowering medications never used any medications across panels.

Conclusions: Between 2005 and 2019, the proportion of adults with diabetes who never used or inconsistently used any glucose-lowering medications over a two-year period grew annually. A third of participants indicated for lipid-lowering medications persistently did not use any medications.