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Declining Rates of Hospitalization for Selected Cardiovascular Disease Conditions Among Adults Aged ≥35 Years With Diagnosed Diabetes, U.S., 1998–2014.

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As noted by de Miguel-Yanes et al. (1), we reported a decline in hospitalization rates from 1998 to 2014 for several cardiovascular disease (CVD) conditions in the U.S. population with diabetes (2). Similar to their report on cardiovascular events in people with diabetes in Spain (3), we found that during the study period hospitalization rates for acute coronary syndrome decreased in the U.S. population with diabetes. In seeming contrast with their findings, we reported in this population overall significant declines in hospitalization rates for ischemic stroke and hemorrhagic stroke. However, consistent with their findings and of particular concern, we noted in the latter part of the period increases in hospitalization rates for ischemic stroke in several subgroups, including those aged 35–74 years, men, women, non-Hispanic whites, and non-Hispanic blacks. Although specific reasons for the observed heterogeneity in our study cannot be determined from surveillance data, shifting patterns of case finding or declines in diabetes incidence (4) and decreases in mortality (5) in the U.S. may be changing the epidemiologic characteristics of the U.S. population with diabetes to a more high-risk population susceptible to the development of diabetes complications. More years of data and continued surveillance of CVD hospitalizations in the U.S. population with diabetes will be needed to confirm these trends.

Furthermore, as de Miguel-Yanes et al (1) pointed out, differences in the impact of treatment, preventive treatment, or risk factor control between populations of different countries may account for differences in CVD trends.

References

1. de Miguel-Yanes JM, Mendez-Bailon M, Jimenez-Garcia R, Lopez-de-Andres A. Comment on Burrows et al. Declining rates of hospitalization for selected cardiovascular disease conditions among adults aged >=35 years with diagnosed diabetes, U.S., 1998–2014. Diabetes Care 2018;41:293–302 (Letter). Diabetes Care 2018;41:e58. 10.2337/dc17-2450 [PubMed: 29150530]
2. Burrows NR, Li Y, Gregg EW, Geiss LS. Declining rates of hospitalization for selected cardiovascular disease conditions among adults aged >=35 years with diagnosed diabetes, U.S., 1998–2014. Diabe-tes Care 2018;41:293–302
3. de Miguel-Yanes JM, Jimenez-Garcia R, Hernandez-Barrera V, Mendez-Bailon M, de Miguel-Diez J, Lopez-de-Andres A. Impact of type 2 diabetes mellitus on in-hospital-mortality after major

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cardiovascular events in Spain (2002– 2014). Cardiovasc Diabetol 2017;16:126 [PubMed: 29017514]

4. Geiss LS, Wang J, Cheng YJ, et al. Prevalence and incidence trends for diagnosed diabetes among adults aged 20 to 79 years, United States, 1980–2012. JAMA 2014;312:1218–1226 [PubMed: 25247518]
5. Gregg EW, Cheng YJ, Saydah S, et al. Trends in death rates among U.S. adults with and without diabetes between 1997 and 2006: findings from the National Health Interview Survey. Diabetes Care 2012;35:1252–1257 [PubMed: 22619288]