COMMENT ON BLOOMGARDEN ET AL.

Is HbA_{1c} <7% a Marker of Poor Performance in Individuals >65 Years Old? Diabetes Care 2017;40:526–528

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Diabetes Care 2017;40:e152–e153 | https://doi.org/10.2337/dc17-0893

Bloomgarden et al. (1) make four claims in their counterpoint to our proposal (2): *1*) we confounded hypoglycemia with "good" glycemic control; *2*) "good" glycemic control benefits all older adults, even those with serious comorbidities, making our measure harmful; *3*) effects of anemia and kidney disease on HbA_{1c} invalidate the measure; *4*) newer drugs make this issue moot. We disagree.

First, serious hypoglycemia is a limiting factor in diabetes treatment, especially with insulin. Its prevention has been identified as a public health issue by the Department of Health and Human Services (3). It has been recommended that the current HbA_{1c} <8% performance measure applicable to older adults be "revisited" to stratify by medication, include comorbid conditions, and incorporate a balancing measure of <7%. Our measure is consistent with each recommendation.

Second, the authors (1) and the American Association of Clinical Endocrinologists state that HbA_{1c} <7% is "currently considered evidence of appropriate treatment." In contrast, our article noted that the American Geriatrics Society, American Diabetes Association, Department of Veterans Affairs/Department of Defense, and Indian Health Service all recommend tiered glycemic target values <8% or even higher for older adults with significant comorbid conditions, especially those at high risk for hypoglycemia.

Bloomgarden et al. (1) state that our measure would result in progression of microvascular complications for many patients. To the contrary, using our sequential approach to building the denominator, no seniors without high-risk conditions would be included in the denominator. All patients with cardiovascular disease had at least one other serious condition. The advanced diabetes category only included patients with advanced eye disease—primarily proliferative retinopathy and vitreous hemorrhage.

Third, although anemia does result in lower HbA_{1c}, the impact is relatively small; a concentration of 6.4% HbA_{1c} at a hemoglobin concentration of 100 g/L would correspond to a concentration of 6.53% HbA_{1c} at a hemoglobin concentration of 140 g/L. Similarly, stage 3B or 4 chronic kidney disease could decrease the percentage of patients marginally above 7.0%. However, the population prevalence of chronic kidney disease is 18.6% in patients with diabetes ≥65 years of age (4), comparable to our study. More importantly, African Americans have higher HbA_{1c} values for any level of glycemic control, leading the American Diabetes Association to recommend that race can be considered in individualizing glycemic targets. It has been proposed that treating to an HbA_{1c} target may result in higher rates of serious hypoglycemic events among African Americans (5). Additionally, we noted that the acceptable variability of a single HbA_{1c} test is considerable. Establishing an individualized target range that avoids the extremes of care accommodates the issues.

Finally, although newer agents may decrease prescription of oral hypoglycemic-prone agents (cost considerations aside), many older adults will benefit from the use of insulin. Moreover, polypharmacy itself has risks. In contrast to established measures, our measure attempts to balance benefits and harms. The need for a medication safety measure addressing both over- and undertreatment is consistent with the modern Hippocratic oath: "I will apply, for the benefit of the sick, all measures which are required, avoiding those twin traps of overtreatment and therapeutic nihilism" (6).

Funding. The work was supported by grants from the Veterans Health Administration Health Services Research and Development Service and its Quality Enhancement Research Initiative to L.M.P. (RRP-12-492) and D.C.A. (SCE 12-181) and to Dr. Chin-Lin Tseng of VA New Jersey Health Care System (IIR 11-077).

The opinions expressed are solely those of the authors and do not represent the views of the Department of Veterans Affairs.

Duality of Interest. No potential conflicts of interest relevant to this article were reported.

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