



COMMENT ON ELY ET AL.

A National Effort to Prevent Type 2 Diabetes: Participant-Level Evaluation of CDC's National Diabetes Prevention Program. Diabetes Care 2017;40: 1331–1341

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Ely et al. (1) from the Centers for Disease Control and Prevention (CDC) provide a first report of National Diabetes Prevention Program (National DPP) effectiveness since its 2012 launch. It is impressive that 4.2% mean weight loss was achieved in a large-scale translation of the original DPP (1), which obtained 4.9% weight loss with the rigor of a randomized controlled trial (2). However, only approximately 0.04% of the 86 million adults in the U.S. with prediabetes were reached in 4 years of implementation (1). Moreover, the authors did not address two critical implications of the findings: 1) future reach of the National DPP is projected to decrease, and 2) the program may contribute to, rather than ameliorate, health disparities as currently implemented.

First, the authors briefly noted recognition is "revoked" for implementation sites that do not meet CDC standards, including ≥5% mean weight loss among active participants (those attending ≥4 sessions) (3). As median weight loss was 3.6% for this subgroup (1), most sites will likely lose recognition after the 3-year period permitted for obtaining full recognition. Revoked recognition threatens reach and financial sustainability of dissemination sites, including loss of service to Medicare beneficiaries based on proposed benefit rules (4). To realize population health goals, increasing the number

of sites and their ongoing reach to at-risk individuals is essential.

Second, the authors reported that racial/ ethnic minority participants achieved lower weight loss than non-Hispanic white participants. Thus, current CDC requirements will likely perpetuate health disparities by disproportionately revoking recognition for sites serving predominantly minority populations, who are also at highest risk. Although minority groups lose less weight, it is promising that each kilogram of weight lost predicted a 16% reduction in diabetes incidence in the DPP trial (5). Thus, weight loss below 5% may produce important individual and public health benefits. The National DPP should continue to be available to racial/ethnic minority individuals until better resources are available. Disparities were also observed for engagement rates; however, engagement was not reported using CDC recognition metrics, which prevents drawing conclusions for implications (another limitation).

The National DPP at Denver Health in Denver, CO, exemplifies the likely detrimental impact on reach and inclusion of the findings of Ely et al. (1). Denver Health served nearly 10 times more eligible participants on average than other sites (i.e., 749 participants according to data submissions vs. a site average of 81 participants according to Ely et al.), of whom 81% represented ethnic/racial minorities.

Mean weight loss obtained among active participants was 3%. Despite reaching an underserved population and achieving important results, Denver Health faces revoked recognition.

The CDC has provided commendable leadership and expertise to establish National DPP infrastructure and adoption. At the same time, it is important to address likely consequences of the current CDC standards on reach and inclusion. While delivering a high-quality program is critical, this result may be achieved with a revised implementation model that includes more robust staff training and retention methods, plus intervention refinement. However, unless CDC standards are adequately revised, the National DPP risks having no significant impact on diabetes rates nationwide.

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