Diabetes prevention program: a lesson in translation

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Type 2 diabetes (T2D) is one of the most rapidly increasing chronic illnesses worldwide. The great personal and societal costs of this illness have heightened interest in prevention of T2D through lifestyle change programs. Weight loss and increased physical activity demonstrate high potential for prevention, particularly in high-risk individuals.

What is the Diabetes Prevention Program? The Diabetes Prevention Program (DPP) is an evidence-based behavioral program that includes a collaborative approach, education, behavioral support, and motivational interviewing. Efficacy of the DPP was established through multi-site clinical trials. The 16-week curriculum of individual or group counseling can be complemented by long-term follow-up. The DPP also includes motivational campaigns and incentives. The primary goals (benchmarks) of DPP were for participants to lose 7% of initial body weight in 6 months and to participate in moderate physical activity for at least 150 min per week.

How has the DPP been translated into practice? Since 2002, many studies have adapted the DPP for use in various settings, particularly to target adults of low socioeconomic status and diverse race and ethnicity. A review of 16 research papers found several studies conducted in each of the following settings: hospital/outpatient clinic, primary care, community, and workplace/church. None of the studies imposed many

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exclusion criteria. Most reduced the number of classes, modified the program to be provided in a group format, and used no or lower cost incentives. Only two studies provided evidence of intervention fidelity.

Summary of review of DPP translation Programs implemented in hospital outpatient settings achieved greater weight loss but less diverse enrollment. Programs implemented in community or church settings reached adults of more diverse race and ethnicity but achieved less weight loss. Hospital outpatient and primary care are promising settings to implement the DPP protocol. Community and work/church settings also hold potential if qualified personnel perform the intervention. Internet and telephone delivery of the DPP remain experimental.

Bottom line The DPP is beginning to be implemented effectively, particularly in hospital outpatient settings. Primary care, worksite, church, and community settings hold potential to reach more diverse populations, especially if qualified personnel can deliver the protocol and achieve weight loss.