



Title The Clinical Effectiveness of Diabetes Education Models

for Type 2 Diabetes: A Systematic Review

Agency NETSCC, HTA, NIHR Evaluation and Trials Coordinating Centre

Alpha House, University of Southampton Science Park, Southampton, SO16 7NS, United Kingdom;

Tel: +44 2380 595 586, Fax: +44 2380 595 639; hta@soton.ac.uk, www.hta.ac.uk

Reference Volume 12.09. ISSN 1366-5278. www.hta.ac.uk/project/1550.asp

Aim

To examine the clinical effectiveness of patient education models for adults with type 2 diabetes.

Conclusions and results

The evidence suggests that education delivered by a team of educators, with some reinforcement at additional points of contact, may provide the best opportunity for improvements in patient outcomes. Educators need to have adequate time and resources to fulfill the needs of any structured educational program. Educational programs need to be clearly described from the outset. The evidence indicates it is unclear what resources would need to be directed at the educators themselves to ensure that they can deliver programs successfully. Including the studies identified in the previous systematic review, 13 published studies addressed education on multiple aspects of diabetes self-management and 8 studies addressed education focused on a particular aspect of self-management. The quality of reporting and methodology of the studies varied. Studies of multicomponent educational interventions yielded mixed results. Some trials reported significant improvements in measures of diabetic control, but others did not. Positive effects may be attributable to longer-term interventions of shorter duration between the end of the intervention and the follow-up evaluation. There may also be an effect of having a multiprofessional team deliver the educational program. Studies of focused educational interventions did not yield consistent results. Some effects were shown on measures of diabetic control in studies that focused on diet or exercise alone. Although the effects shown were generally small, those that were present appeared to be relatively long lasting. This update does not substantially alter the conclusions of the previous systematic review; for each outcome, a similar proportion of studies demonstrated significant effects of education.

Recommendations

See Executive Summary link at www.hta.ac.uk/project/1550.asp.

Methods

See Executive Summary link at www.hta.ac.uk/project/1550.asp.

Further research/reviews required

Any future research should consider patient education within the context of overall diabetes care and, as such, should follow guidelines for the development and evaluation of complex interventions. Good-quality, longer-term studies would be desirable, but these would require careful consideration of the nature of any control group. To ensure the success and cost effectiveness of educational programs, information is needed to clarify the sensitivity of diabetes education programs in relation to the performance of the diabetes educators.