



Title	Type 2 Diabetes. A Health Technology Assessment of Screening, Diagnosis and Treatment
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Aim

In Denmark, as in many other Western countries, the prevalence of type 2 diabetes (T2D) is rapidly increasing. Studies estimate that in a Danish population of 5.3 million, between 100 000 and 150 000 individuals are diagnosed with T2D, and a similar number are undiagnosed. On this basis, DACEHTA initiated an HTA project to provide broad, evidence-based input to decision making on how to approach this health problem.

Conclusions and results

Population-based screening for T2D has no well-documented effect on hard endpoints, and cost-effectiveness studies show that the cost per avoided complication is high. T2D patients with atherosclerosis and/or albuminuria have a documented effect from individualized, intensive polypharmacological therapy. The extra costs of intensive therapy vary between 42 and 105 million USD depending on the intensity of strategy applied. Systematic screening for diabetic retinopathy is expensive, but cost effective. The evidence on most nonpharmacological interventions proved poor and inconclusive.

Recommendations

A general recommendation is that efforts should be made to establish a uniform organization and structure that ensures coherent patient care with regular controls. Population-based screening is not recommended. Intensified clinical case finding is recommended instead. Furthermore, it is recommended that T2D patients with atherosclerosis and/or albuminuria should receive individualized, intensive, polypharmacological therapy, and that patients with T2D should be screened for retinopathy by fundus photography on a regular basis. Specific recommendations concerning nonpharmacological treatment are difficult to make due to poor documentation of most nonpharmacological interventions. With this in mind, it is recommended that a low-fat hypocaloric diet, physical activity, and smoking cessation comprise a basic offer to patients with T2D.

Furthermore, regular foot therapy, therapeutic shoes, and custom insoles are recommended to high-risk patients to avoid foot ulcers and amputation. Patient education should be offered to all T2D patients, but establishment of more schools should await thorough evaluation of existing diabetes schools.

Methods

Systematic literature reviews were conducted on clinical effectiveness and patient aspects, combined with economic evaluations and analyses of organizational aspects. The literature was rated by level of evidence.

Further research/reviews required

Well-designed and sufficiently large multicenter studies addressing the value of nonpharmacological treatment, including its organization, are required.