

Diabetes mellitus in Germany – better care is costly

The management of patients with diabetes mellitus in Germany would result in considerably higher therapeutic monitoring costs if the European consensus guidelines for the management of this condition were followed. In contrast, adherence to these recommendations could generate considerable savings in terms of drug acquisition and administration. These are the findings of researchers from the Universities of Köln and Düsseldorf, Germany.

They investigated the direct costs of treatment and therapeutic monitoring in 350 patients with diabetes mellitus receiving outpatient care in Germany. These patients were identified from a representative population-based sample (n = 6085). Diabetes-related costs included those associated with drug acquisition and administration, physician services, therapeutic monitoring and other diagnostic procedures.

Guidelines recommend more controls

The total costs in patients with insulin-dependent diabetes mellitus (IDDM) were DM1218/patient/year, compared with DM211/patient/year in patients with non-insulin-dependent diabetes mellitus (NIDDM) and DM42/patient/year in those controlled by diet alone [see table]. The recommended costs, based on the European guidelines, would have been DM1758, DM287 and DM198 for the 3 respective patient subgroups.

In patients with IDDM, more frequent use of test strips for blood glucose monitoring is recommended in the guidelines at a cost of DM624/patient/year, instead of the actual DM87/patient/year identified in the study. In patients with NIDDM who were using oral antihyperglycaemic agents, the maximum recommended dosage was exceeded in 13% of patients in the study. Annual costs for oral antihyperglycaemic agents could be reduced by 40% or by a mean of DM59/patient, note the researchers, if these agents were only given as indicated and recommendations for the maximum daily dosage were followed.

Better control reduces costs in long term

Better management of patients with diabetes mellitus is associated with considerably higher expenses, point out the researchers.

Observed <i>vs</i> recommended costs of diabetes mellitus (DM/patient/year)			
Cost variable	Observed costs	Recommended costs	Difference
Insulin-dependent diabetes mellitus:			
Drug therapy*	1013	989	+24
Blood glucose monitoring**	182	743	-561
Other diagnostic procedures†	23	26	-3
Total costs for monitoring	205	769	-564
Total costs	1218	1758	-540
Non-insulin-dependent diabetes mellitus:			
Drug therapy*	148	89	+59
Blood glucose monitoring**	44	172	-128
Other diagnostic procedures†	19	26	-7
Total costs for monitoring	63	198	-135
Total costs	211	287	-76
Patients controlled by diet alone:			
Blood glucose monitoring‡	16	172	-156
Other diagnostic procedures†	26	26	-
Total costs	42	198	-156
* Including insulin for patients with IDDM or NIDDM, syringes for insulin administration in patients with IDDM or NIDDM, and oral antihyperglycaemics in patients with NIDDM			
** Including glycosylated haemoglobin, blood glucose tests by physicians, blood test strips, urine test strips and lancets			
† Including cholesterol triglycerides and creatinine levels and funduscopic examination			
‡ Including glycosylated haemoglobin, blood glucose tests by physicians and urine test strips			

However, better outpatient care of these patients would reduce duration of hospital stay and therefore, in the long term, reduce costs, they say.

The total additional costs required for therapeutic monitoring of all patients with diabetes mellitus in Germany, according to the guidelines, would be about DM689 million/year, conclude the researchers.

von Ferber L, Köster I, Hauner H. Direct costs of ambulatory care of diabetes. Comparison between observed costs and estimated costs of treatment according to European recommendations. Medizinische Klinik 91: 802-808, 15 Dec 1996

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