

differences in cited prescribing patterns between type 2 diabetic patients in America, Australia, and Europe. For example, results from the National Health and Nutrition Examination Survey 1999–2000 cohort (2,3) and a large western U.S. study (4) are consistent in finding that ~34% of type 2 diabetic patients on medication are using insulin. However, a more recent study (5) in the Canadian primary care setting reported only a 14% use of insulin, while two independent Australian studies (6,7) and our own results show an insulin prevalence of 16–18%. Studies in Denmark (8) and France (9) establish an insulin prescription rate of 24 and 17%, respectively. It therefore appears that physicians in U.S. are more likely to initiate insulin therapy for type 2 diabetic patients than their colleagues in other Western countries. The discrepancy between physicians' attitudes, as reported by Peyrot et al. (1), and actual practice may represent a lack of generalizability of their findings or that the such "attitudes" are not the principal determinants of prescribing behavior.

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**Resistance to Insulin Therapy Among Patients and Providers: Results of the Cross-National Diabetes Attitudes, Wishes, and Needs (DAWN) Study**

Response to Phillipov and Phillips

Phillipov and Phillips (1) suggest that our finding (2) that U.S. physicians were significantly more disposed to delay insulin therapy than were physicians in all other countries surveyed contradicted reports from other studies of the proportion of patients with type 2 diabetes taking insulin in the U.S., Australia, and some European countries. Phillipov and Phillips conclude that either our findings cannot be generalized or that attitudes are not the key determinant of prescribing behavior.

We thank Phillipov and Phillips for providing additional information regarding international differences in insulin-prescribing attitudes and behaviors. We agree that attitudes alone do not deter-

mine physician prescribing behavior. Also important is the level of perceived need for insulin. The relevance of the attitude identified in our study depends explicitly on the level of perceived need for insulin treatment (delay of insulin “until it is absolutely essential”). If the need is perceived as greater in the U.S. than in other countries, U.S. physicians might be more likely to prescribe insulin even if they have a higher threshold for making that choice. The level of perceived need might itself be a function of attitudes or it could be a result of actual differences in need, e.g., higher BMI, worse glycemic control, patient unwillingness to change lifestyles, etc.

We believe that finding out how all of these factors combine to influence physicians' insulin-prescribing behaviors would be a major contribution to the field. We hope that others will continue the study of this issue.

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