

Making Diabetes Count

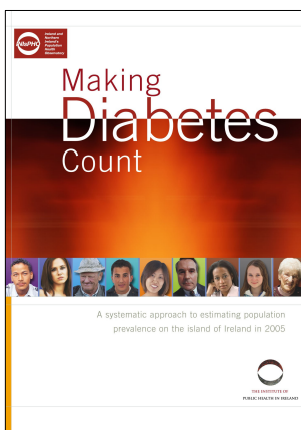
A systematic approach to estimating population prevalence on the island of Ireland in 2005

Introduction

This project developed estimates of population prevalence of diabetes for the island of Ireland in 2005, based upon the PBS Model. Implied undiagnosed rates were also calculated by comparing results from the PBS Model with clinical estimates, such as those from the Quality Outcomes Framework (QOF).

Methodology

The PBS Diabetes Population Prevalence Model was developed by the Yorkshire and Humber Public Health Observatory (YHPHO), Brent NHS Primary Care Trust, and the University of Sheffield's School of Health and Related Research (SchARR) and adapted for use on the island of Ireland by an All-Ireland working group.



It provides estimates of the numbers of people with type 1 and type 2 diabetes (diagnosed and undiagnosed) for particular geographical areas, by applying the findings of epidemiological reference studies to population counts. The model takes into account the age, sex and ethnicity structure of an area and the level of deprivation – all of which are known to affect the prevalence of diabetes.

Results

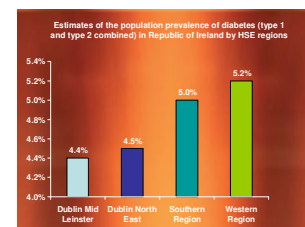
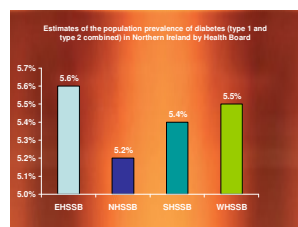
The model generates national and sub-national population prevalence estimates of diabetes (type 1, type 2 and all types combined) for the island of Ireland broken down by:

- Gender
- Age
- Ethnicity (Northern Ireland only)

The first report of the working group was published in June 2006.

The model estimates that 5.4 % of adults (aged 20 years and over) in Northern Ireland have diabetes (type 1 and type 2 combined). This equates to approximately 67,000 people. Approximately 141,000 adults (4.7%) in the Republic of Ireland are estimated to have diabetes (type 1 and type 2 combined).

Population prevalence rates for diabetes vary by local geographical area.



In Northern Ireland, it was also possible to estimate the number of people with undiagnosed diabetes by comparing the estimates generated by the PBS model to those generated from QOF data (cases of diabetes registered within general practice).

23.5% of all cases of diabetes (type 1 and type 2 combined) in people aged 17 years and over in Northern Ireland are estimated to be undiagnosed (15,800 people). It was not possible to carry out a similar exercise in the Republic of Ireland because there was no suitable general practice data.

The working group made a number of research and data recommendations including:

- Support for a national diabetes register
- All-Ireland obesity/ overweight monitoring
- All-Ireland cross-sectoral population studies to accurately estimate prevalence

Future work

The All-Ireland working group is now developing forecasts for population prevalence of diabetes (diagnosed and undiagnosed) for the island using various scenarios based upon population projections and possible trends in obesity.

Partners

The All-Ireland Diabetes Prevalence Working Group includes representation from;

- Eastern Health & Social Services Board
- NI Consultant Group in Endocrinology and Diabetes
- Department of Health, Social Services and Public Safety
- Diabetes Federation of Ireland
- Department of Health & Children
- Diabetes UK
- Health Services Executive, North Western Area
- Trinity College Dublin
- University College Cork
- Irish Endocrine Society

