



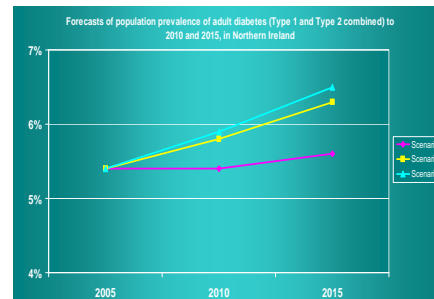
Making Diabetes Count

Introduction

This project developed estimates for 2005 and forecasts for 2010 & 2015 of population prevalence of diabetes for the island of Ireland based upon the PBS Model. Forecasts were developed to account for changes in the population structure and three scenarios representing different trends in BMI distribution over the period 2005-2015.

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.



To generate the forecasts three scenarios were developed. All three scenarios use the same population projections but vary in terms of projected BMI distribution.

The most realistic scenario assumes a linear increase in obesity between 2005 & 2015 with the rates of underweight/normal BMI slowing exponentially. The less radical scenario has BMI patterns remaining constant at the 2005 level, and the more radical scenario shows the impact of a linear increase in obesity between 2005 & 2015 with the rates of underweight/normal BMI slowing exponentially.

The estimated population prevalence in 2005 of Type 1 and Type 2 diabetes in adults (aged 20+ years) was 5.4% (67,000) in Northern Ireland and 4.7% (141,000) in the Republic of Ireland.

The model forecasts that the population prevalence of diabetes in 2010 will rise to 5.8% (74,000 adults) in Northern Ireland and 5.0% (162,000) adults in the Republic of Ireland.

By 2015 there will be a further rise in the population prevalence of diabetes to 6.3% (84,200 adults) in Northern Ireland and 5.6% (194,000 adults) in the Republic of Ireland.

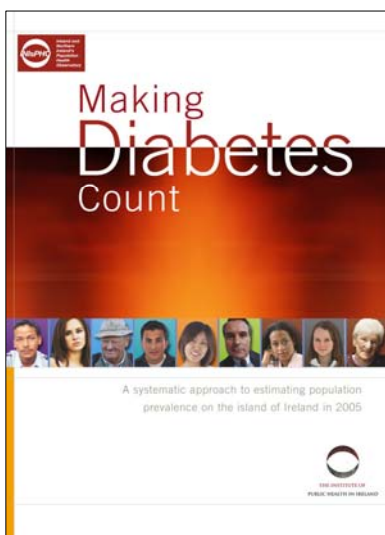
The working group made a number of research and data recommendations including:

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

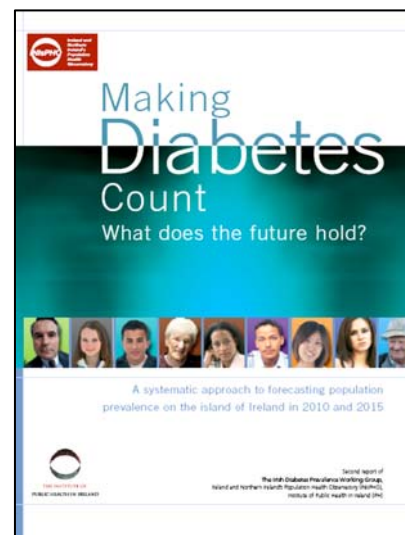
Partners

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 Northern Ireland
- Health Services Executive, North Western Area
- Trinity College Dublin
- University College Cork
- Irish Endocrine Society
- Yorkshire & Humber Public Health Observatory



June 2006



June 2007

The model provides area-based estimates and forecasts of the number of people with Type 1 & Type 2 diabetes (diagnosed and undiagnosed), by applying the findings of epidemiological reference studies to population counts. It accounts for age, gender, ethnicity and socio-economic factors which are known to affect the prevalence of diabetes.

Why do we need estimates/forecasts of population prevalence?

- to describe changing patterns of diabetes in the population
- to support rational planning and development of services
- to guide resource allocation at local and regional levels

Results

The model generates national and sub-national population prevalence estimates and forecasts of diabetes (Type 1 & Type 2 combined, and Type 2) for the island of Ireland broken down by gender.

