RESOURCE BOOKLET FOR DEFINING TARGET POPULATIONS IN COMMUNITY-BASED RESEARCH IN THE REPUBLIC OF IRELAND

Student: Alison Leong
Supervisor: Dr Yvonne Finn
Table of Contents

Aim of booklet and Introduction ............................................................................................................. 2

Part A: Government and Government Related Resources to Define Target Population in Community-Based Research in the Republic of Ireland ................................................................. 5

1. Internet Search for Relevant Government and Government Related websites ............. 5

2. The Central Statistics Office (CSO) ............................................................................................... 12

3. Publications & Reports on Population Health Research from Websites Listed in 1. above ......................................................................................................................................................... 14

4. Websites Classified According to Presentation of Data: Mapped or With Datasets ...... 19

4.1 Mapped Data .................................................................................................................................... 19

4.2 Other Datasets which do not have Maps ...................................................................................... 20

Part B: Case Study Illustration ............................................................................................................. 21

1. Application of Information from Relevant Websites Listed in Part A to Define the Population Characteristics of the Target Population ................................................................. 21

2. Application of Information from Relevant Websites Listed in Part A to Establish what is known on the Prevalence of Diabetes and Risk factors for Diabetes in Disadvantaged Areas ........................................................................................................................................... 25

3. Results of Google Search for Other Relevant Organisations and Information .......... 26

4. Enquires made to Relevant Agencies to find unpublished information on the Health and Socioeconomic status of Galway City residents ........................................................................ 29

5. Using Information Obtained To Calculate the Target Population Eligible for Diabetes Risk Screening .............................................................................................................................................. 31

6. Diabetes Websites ............................................................................................................................... 34
Foreword and Introduction

Aim of Booklet

Researchers planning projects in population health research and/or community-based research will benefit from this booklet, which provides details of sources to define the numbers and characteristics of a target population of interest in the Republic of Ireland. This booklet will also be of use to persons working in Public Health, particularly those involved in health prevention programmes.

Sources of data to define target populations include government or government related agencies, which is available through their websites. These websites frequently contain reports and publications on specific aspects of population and population health in the Republic. Data available includes demographics such as age and sex, data from national health surveys, data pertaining to health-related risk factors such as measures of deprivation and employment and morbidity and mortality data. Such data may be at a national, regional or local authority level. Data at the level of electoral division and Small Area (the smallest defined geographical area) is also available. Additionally some non-government organizations collect and report on population and population health statistics on their websites. This booklet provides information on websites detailing this information.

The booklet is structured in two parts. Part A details the search approach and the websites identified (Section 1), presents the Central Statistics Office website (Section 2) as a key source of data, and identifies the relevant publications and reports available in websites (Section 3) on the population in the Republic of Ireland. Part B works through a proposed case study to illustrate the application of the resources detailed in Part A to define a preselected target population - in this case for inclusion in a community-based diabetes risk screening study. For reasons of time-constraints and after checking current rankings of online search engines by Quantcast and Alexa the search engine chosen was Google www.alexa.com; www.quantcast.com. Google is ranked by both companies as the current number one search engine www.google.ie

Importance of Defining Target Populations

Defining the target population in community based research is done by establishing inclusion and exclusion criteria and using available data on estimating the likely number of persons eligible to be included. An estimate on the number of persons who are likely to have the condition being researched is helpful in the planning stages as it allows calculation on the resources required and can influence the study design. For example a decision to include all eligible persons to participate or, alternatively, to randomly select a representative sample from the whole target population can be made. Additionally, estimation of resources required and calculation of a reasonable timeframe to complete the research, can be made in the planning stages.
Background of Case Study.

Benefits of screening for risk of type 2 diabetes (T2D)

Diabetes represents an important public health problem, with the metabolic disease projected to be the seventh leading cause of death worldwide by 2030. Prediabetes, a condition of impaired glucose tolerance but not established diabetes, puts an individual at an increased risk of diabetes. Detection of prediabetes would provide opportunities for lifestyle modifications and/or medications, which can delay and/or prevent the progression to diabetes. Any screening programme which aims to prevent diabetes by identifying people at high risk of diabetes will inadvertently identify people with undiagnosed diabetes. Those who are diagnosed with type 2 diabetes can be referred to a multi-disciplinary diabetes care team while those found to be at high risk can be offered interventions that slow progression to type 2 diabetes.

Selective diabetes risk screening according to NICE public health guidance 38

Screening all of the population is costly and potentially inefficient. The NICE public health guidance 38 recommends a two stage approach to screening, firstly a validated risk-assessment questionnaire and secondly a blood test to confirm high risk. It states that the following groups of people are at a high risk of developing diabetes and should be targeted in risk assessment:

1. All eligible adults aged 40 and above, except pregnant women.
2. People aged 25–39 years of South Asian, Chinese, African-Caribbean, black African and other high-risk black and minority ethnic groups, except pregnant women.

Furthermore groups known to be at higher risk of diabetes should be targeted. This includes those with cardiovascular disease, hypertension, stroke, mental health problems and those in lower socioeconomic classes. Targeting groups who are at higher risk of type 2 diabetes leads to an increase in the Positive Predictive Value of a diagnostic test which translates into more cases detected; this has implications for the cost effectiveness of a screening programme.

Targeting disadvantaged areas

The link between socioeconomic status and the prevalence of type 2 diabetes has been well established and documented. More deprived areas have a higher prevalence of type 2 diabetes, possibly due to risk factors such as obesity, physical inactivity, smoking, and low birth weight, which are more strongly associated with lower social classes [1]. In this case study, those who meet the criteria 1 and 2 above, and who live in disadvantaged areas in the geographical area of interest were chosen as the target population for screening.


School of Medicine, National University of Ireland, Galway
Definition of target population

For this case study, the target population for diabetes risk screening is persons living in disadvantaged areas of Galway City, who are:

- above 40 years of age,
- aged 25-39 years in ethnic minority groups, or
- have conditions that increase the risk of type 2 diabetes.

Purpose of defining target populations

Defining the target population allows us to describe the known health, social, economic, and demographic characteristics of the population in these areas. Combined with knowledge from the literature on the prevalence of type 2 diabetes and risk factors for type 2 diabetes allows us to determine the number of people who are eligible for the first stage of diabetes risk assessment - the completion of a risk assessment questionnaire. We can estimate the number of people within the target population likely to have a high risk of diabetes (a high risk score using the risk assessment questionnaire and also a fasting plasma glucose of 5.5–6.9 mmol/l or an HbA1c level of 6.0–6.4%) and hence the number likely to be eligible for an intensive lifestyle intervention programme. Knowing the number of people within the target population with undiagnosed diabetes would also enable us to determine the number of people for whom diabetes management is likely to be required. With this kind of information on target population size and characteristics the researcher can make decisions on the appropriate design and methodology of the project, and calculate the resources required.

Finally we hope you find this booklet a useful resource in planning population health research projects and informing audiences on current information on health-related population information in the republic of Ireland. We welcome any feedback and/or queries about the booklet you may have. Contact email is yvonne.finn@nuigalway.ie

Alison & Yvonne

Ms Alison Leong, Year 2 Medical Student
Dr Yvonne Finn, Lecturer in Clinical Methods & Clinical Practice
September 2014

School of Medicine, National University of Ireland, Galway
Part A: Government and Government Related Resources to Define Target Population in Community-Based Research in the Republic of Ireland

Part A presents the search approach and results on websites which document the population in the Republic of Ireland. Relevant publications and reports from these websites are also documented. (The application of data related to Galway City obtained from the relevant websites will be illustrated by our Case Study in Part B.)

1. Internet Search for Relevant Government and Government Related websites

An advanced Google search was conducted to find pages with all of the words “Government Websites” AND “Ireland” together with any of the words “Government Agency” OR “Government Agencies”, and the results limited to the domain ‘.ie’ to show only websites with a connection to Ireland. The search yielded 119 results, of which 5 were potentially relevant after the screening of title and abstract and the removal of duplicates. The first was a website ‘gov.ie’ (www.gov.ie) identified as a portal to all government websites in the Republic of Ireland. The second was a website of the Mayo County Council which provides information on a selection of government agencies (http://www.mayococo.ie/en/YourCouncils/OtherAgencies/IrishGovernmentSites). The third website was ‘Finder.ie’ (http://www.finder.ie/Government) which also provides a selection of Government websites, organising them into categories such as ‘Departments’ and ‘Executive Agencies’ and providing a link back to ‘gov.ie’. The fourth website was ‘Browse.ie’ (http://www.browse.ie/Government) where links to government websites, most of them relevant to Northern Ireland, are available. The final website identified was that of ‘The National Archives of Ireland’ which provides links to websites holding the modern and historical records of Ireland (http://www.nationalarchives.ie/visit-us/related-agencies-in-ireland-and-worldwide).

www.gov.ie – The official portal to all government websites

Manual screening of the 519 websites listed in the portal “gov.ie” identified 22 websites which were relevant. Screening of the lists of websites provided by the other 4 relevant websites named above yielded no additional websites. The following lists the 22 websites and the type of information they provide.

1. Central Statistics Office (CSO)
   www.cso.ie
   The CSO is an independent office under the aegis of the Taoiseach (as per the Statistics Act 1993). It is involved in the collection and dissemination of statistics relating to economic, social and general activities and conditions in the State. Official statistics of
other public authorities are also coordinated by the CSO. More information on the CSO is available in Section 2 of Part A of the booklet. There is a ‘database’ section in the CSO website which provides links to other national and also global databases where indicators can be compared among different countries. Examples include:

i. **StatBank**
   (http://www.cso.ie/px/pxeirestat/statire/SelectTable/Omrade0.asp?Planguage=0), CSO's online database of current and historical official statistics,

ii. **Department of Education Statistics Website** (http://www.cso.ie/px),

iii. **Eurostat** (http://epp.eurostat.ec.europa.eu), a portal to European statistics, and

iv. **United Nations Economic Commission for Europe Statistical Database** (http://w3.unece.org), where data is presented in subject areas such as gender and economics.

2. **Citizens Information Board**
   www.citizensinformationboard.ie
   The Citizens Information Board is a statutory body providing information, advice and advocacy on a broad range of public and social services. It provides the Citizens Information website (www.citizensinformation.ie) with information on public services and entitlements in Ireland. In its publications section, research and social policy reports are available. This includes a report on the nature of queries, such as social welfare and health services queries, presented by clients to the Citizen’s Information Services and the demographic and socio-economic profile of these clients (See Section 3 of Part A).

3. **Department of Children and Youth Affairs**
   www.dcyagov.ie
   The Department is responsible for a number of key areas of policy and provision for children, young people and families in Ireland. The ‘Research’, ‘Growing Up in Ireland’, and ‘National Research and Data Strategy’ sections provide useful information for those interested in doing research on children or adolescents. An inventory of data sources on children’s lives is available (http://dcya.gov.ie/inventory-of-data-sources-on-childrens-lives). In addition, a link to childrensdatabase.ie (www.childrensdatabase.ie) is provided which makes available a collection of Irish government policy documents, databases, and specialist libraries, together with Irish, European and international resources on children.

4. **Department of Education and Skills**
   www.education.ie
   The department is responsible for education and training. The ‘Publications’ section has an ‘Education Reports’ subsection with reports on the impact of cyberbullying and results of a ‘Lifeskills’ survey which is useful for those doing research on the mental health of children and adolescents. In the ‘Statistics’ subsection there are key statistics on school/ pupil/ teacher numbers in various local authority areas as well as data on individual schools such as their addresses. In addition, a Delivering Equality of
Opportunity in Schools (DEIS) school list is available, which allows researchers to know which schools have been designated as disadvantaged (see Section 3 of Part A).

5. **Department of Environment, Community and Local Government**
   
   [www.environ.ie](http://www.environ.ie)

   Information about the environment, community development programmes, and local governments are available here. Under the ‘Local Governments’ section a comprehensive contact list of County, City, Borough and Town councils is available ([www.environ.ie/en/LocalGovernment/LocalGovernmentAdministration/LocalAuthorities](http://www.environ.ie/en/LocalGovernment/LocalGovernmentAdministration/LocalAuthorities)).

6. **Department of Health**
   
   [www.dohc.ie](http://www.dohc.ie)

   The Department of Health is involved in the planning of health services and health policy formulation and evaluation. A list of selected publications on national health is available in Section 3 of Part A.

7. **Department of Justice and Equality**
   
   [www.justice.ie](http://www.justice.ie)

   The Department of Justice and Equality is responsible for administration and policy of various agencies such as An Garda Síochána and immigration related services. For those interested in doing research on asylum seekers there is a link to the Irish Naturalisation and Immigration Service website ([http://www.inis.gov.ie](http://www.inis.gov.ie)) and to the Reception & Integration Agency (RIA) ([http://www.ria.gov.ie](http://www.ria.gov.ie)).

8. **Department of Social Protection**
   
   [www.welfare.ie](http://www.welfare.ie)

   The department administers over 70 separate schemes and services impacting various groups of people, such as social insurance and social assistance income support schemes. Under the publications section, useful information provided include the number of recipients on various support schemes by county (see Section 3 of Part A) and the Family Research Programme providing information about family structure in Ireland ([http://www.welfare.ie/en/Pages/Families-Research-programme.aspx](http://www.welfare.ie/en/Pages/Families-Research-programme.aspx)).

9. **Health information and Quality Authority (HIQA)**
   
   [www.hiqa.ie](http://www.hiqa.ie)

   HIQA is an independent authority responsible for the quality and safety of residential services for children, older people and people with disabilities in Ireland. It also advises on the collection and sharing of information across healthcare services. The ‘Social Care’ and ‘Healthcare’ subsections provide the mapped locations of residential care centres for older people and hospitals. An online catalogue of national health information sources is available in the ‘Health Information’ subsection ([www.hiqa.ie/healthcare/health-information/data-collections/online-catalogue](http://www.hiqa.ie/healthcare/health-information/data-collections/online-catalogue)).

10. **Health Protection and Surveillance Centre (HPSC)**

    [www.hpsc.ie](http://www.hpsc.ie)
Some of the responsibilities of the HPSC include the surveillance of communicable diseases, and the provision of information on infectious diseases to the public. Annual reports produced provide information on the number and incidence rates of communicable diseases in the population.

11. Health Service Executive (HSE)
www.hse.ie
The HSE runs all of the public health services in Ireland. Useful publications are detailed in Section 3 of Part A.

12. Health Research Board (HRB)
www.hrb.ie
The HRB maintains the databases such as the National Psychiatric In-patient Reporting System, the National Intellectual Disability Database and The National Physical and Sensory Disability Database. Selected publications are listed in Section 3 of Part A.

13. Houses of the Oireachtas
www.oireachtas.ie/parliament
A link to the Oireachtas Library & Research Service is available (http://opac.oireachtas.ie/liberty/libraryHome.do). Government reports, annual accounts, and other important documents that are formally presented to the parliament can be assessed here.

14. Institute of Public Health in Ireland (IPH)
www.publichealth.ie
The IPH promotes cooperation for public health on the island of Ireland. The following links from this website would be useful:

   i. Chronic Conditions Hub
   http://chronicconditions.thehealthwell.info
   The Chronic Conditions Hub, part of the Health Well website managed by the IPH in collaboration with the HRB Centre for Health and Diet Research in Ireland and the UKCRC Centre of Excellence for Public Health in Northern Ireland, brings together a range of information on chronic conditions. National population prevalences of chronic conditions such as diabetes as well as the geographical variation of prevalences by local health offices are available in the publications listed on the website (see Section 3 of Part A).

   ii. The Health Well
   www.thehealthwell.info
   The Health Well is an all-island (Ireland and Northern Ireland) health information website. Under the ‘Community Profiles’ section (www.thehealthwell.info/community-profiles?source=hometab) different themes such as obesity and diabetes are available, and within each theme different indicators can be selected to see how the indicator varies across the island. In addition, customised tables can be built for up to four geographical areas by selecting indicators in each specific theme.
Figure 1: Under the theme ‘Diabetes’, the indicator ‘Clinical diagnosis of Self-reported, doctor diagnosed diabetes in the previous 12 months, ROI 2010’ has been selected to show how the indicator varies across the Republic of Ireland.

Figure 2: Indicators in the theme ‘Diabetes’ such as ‘Pct eat < 5 fruit and veg ROI 2007’ and ‘Pct inactive ROI 2007’ have been selected for four geographical areas (Cork City, Dublin City, Galway City and Galway County) to build a table.
15. Lenus, the Irish health repository
http://www.lenus.ie/hse/handle/10147/16012
A comprehensive collection of health services research and grey literature is available here. The research output of the many healthcare organisations is provided, along with their administrative, clinical and regulatory publications.

16. National Cancer Registry of Ireland
www.ncri.ie
For every new case of cancer in Ireland, patient and cancer details are collected by the Registry. The data is presented in the form of cancer factsheets and atlases; datasets are available for download in CSV or DBF formats.

17. National Council on Aging and Older People
www.ncaop.ie
Although the council has been dissolved, an archive of resources on the aspects of ageing and welfare of older people is available in the ‘Research and Publications’ section, useful for those who are doing research on older groups of people.

18. National Youth Council of Ireland
www.youth.ie
The council represents and supports the interests of voluntary youth organisations. Information about the National Youth Health Programme and its publications are available, as well as the Irish Youth Health Promotion Bibliography which is useful for research on youth health promotion as it is a comprehensive bibliography of published and unpublished studies, post-graduate theses, and other research studies on that matter.

19. POBAL
www.pobal.ie
Pobal is a not-for-profit organisation with charitable status that manages various funding programmes on behalf of the Irish Government and the EU. In 2012, it released the Pobal-HP deprivation index for Small Areas, the smallest defined geographical area. A link to the Trutz Haase website is provided, where the social and demographic characteristics as well as the Pobal HP deprivation indexes of various counties in the Republic of Ireland are available (http://trutzhaase.eu/deprivation-index/area-profiles). The Pobal HP deprivation index is constructed based on three parameters, namely demographic profile, social class composition and labour market situation, derived from Census data. Relative index scores allow for the comparison of different areas between areas at a single point in time.

20. Social Inclusion
www.socialinclusion.ie
The Social Inclusion division, part of the Department of Social Protection, has an archive of resources on poverty available in its ‘Publications’ section. Regional community
profiles of certain groups of people such as older people are available in its ‘Local Focus’ section (http://www.socialinclusion.ie/local.html).

21. StatCentral.ie  
www.statcentral.ie  
This is a portal for all Ireland’s official statistics provided by the Central Statistics Office and other government departments. In this portal, links to recurring statistics are given.

22. Western Development Commission (WDC)  
www.wdc.ie  
The WDC is a statutory body that was set up to promote both social and economic development in the Western Region (Donegal, Leitrim, Sligo, Mayo, Roscommon, Galway and Clare). Under the section on ‘County Profiles’, information about Galway is available as well as that of the other counties in the western region.
2. The Central Statistics Office (CSO)
Agency responsible for population data in the republic of Ireland

The most comprehensive source of data on population at national, regional and local level can be obtained from the Central Statistics Office (CSO) website. The CSO conducts a Census of the population every 5 years, collecting data involving person and household variables from 1,400,000 households through the use of questionnaires. The data is then disseminated in a range of specialised publications. The last Census in 2011 makes available data of the population in terms of age, sex, marital status, living arrangements, usual residence, migration, nationality, foreign languages, ethnic or cultural background, Irish language and housing.

The Census provides statistics for the total population in the Republic of Ireland, for each of the 26 counties, for electoral divisions (EDs), and for the smallest defined geographical areas called Small Areas. Data for a particular area can be accessed via SAPMAP, an interactive mapping tool available in the Census 2011 website (http://census.cso.ie/sapmap). Users first select the geographic boundary they are interested in, and by pinpointing a location on the map, they can access all of the 2011 Census tables that have been produced for that area.

Using the SAPMAP, information can be retrieved and is presented under 15 theme headings. These are detailed in Table 3. Information under each theme is presented in a number tables. Data can also be downloaded in excel CSV and pdf format.

<table>
<thead>
<tr>
<th>Theme</th>
<th>SAPS Table</th>
</tr>
</thead>
</table>
| Theme 1: Sex, age and marital status | - Population aged 0-19 by sex and year of age, persons aged 20+ by sex and age group  
- Population by sex and marital status |
| Theme 2: Migration, ethnicity and religion | - Usually resident population by place of birth and nationality  
- Usually resident population by ethnic or cultural background  
- Usually resident population aged 1 and over by usual residence 1 year before Census Day  
- Population by religion  
- Speakers of foreign languages by language spoken  
- Speakers of foreign languages by ability to speak English |
| Theme 3: Irish language | - Population aged 3 or over by ability to speak Irish  
- Irish speakers aged 3 or over by frequency of speaking Irish  
- Irish speakers within education aged 3+, by frequency of speaking Irish outside education |
| Theme 4: Families | - Families, family members and children in families, by size of family  
- Family units with children by size and age of children  
- Family units with children by type of family and age of children  
- Families by age of youngest child |
<table>
<thead>
<tr>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Private households - Private households by type - Private households by size</td>
</tr>
<tr>
<td>6</td>
<td>Housing - Private households by type of accommodation - Permanent private households by year built - Permanent private households by type of occupancy - Permanent private households by number of rooms - Permanent private households by central heating - Permanent private households by water supply - Permanent private households by sewerage facility - Occupancy status of permanent dwellings on Census night</td>
</tr>
<tr>
<td>7</td>
<td>Communal establishments - Persons in Communal Establishments</td>
</tr>
<tr>
<td>8</td>
<td>Principal status - Population aged 15 years and over by principal economic status and sex</td>
</tr>
<tr>
<td>9</td>
<td>Social class and socio-economic group - Population by sex and social class - Persons in private households by socio-economic group of reference person</td>
</tr>
<tr>
<td>10</td>
<td>Education - Population aged 15 years and over by age education ceased - Population aged 15 years and over whose education has not ceased - Population aged 15 years and over by field of study - Population aged 15 years and over by sex and highest level of education completed</td>
</tr>
<tr>
<td>11</td>
<td>Commuting - Population aged 5 years and over by means of travel to work, school or college - Population aged 5 years and over by time leaving home to travel to work, school or college - Population aged 5 years and over by journey time to work, school or college</td>
</tr>
<tr>
<td>12</td>
<td>Disability, carers and general health - Persons with disability by age group - Carers by sex and number of unpaid hours per week - Population by general health and sex</td>
</tr>
<tr>
<td>13</td>
<td>Occupation - Persons at work or unemployed by occupation and sex</td>
</tr>
<tr>
<td>14</td>
<td>Industries - Persons at work by industry and sex</td>
</tr>
<tr>
<td>15</td>
<td>PC and internet Access - Number of households with cars - Number of households with a personal computer - Number of households with internet</td>
</tr>
</tbody>
</table>

Table 1: Themes and their respective tables.
3. Publications & Reports on Population Health Research from Websites Listed in 1. above

Reports on a wide range of topics in population health research carried out in the Republic of Ireland are published in the Government websites identified. The following is a selection of these reports, chosen to give an overview of the varying target populations researched and reported on.

Central Statistics Office (www.cso.ie)

<table>
<thead>
<tr>
<th>Title</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarterly National Household Survey (1st quarter of 2014)</td>
<td><a href="http://www.cso.ie/en/releasesandpublications/er/qnhs/quarterlynationalhouseholdsurveyquarter12014">http://www.cso.ie/en/releasesandpublications/er/qnhs/quarterlynationalhouseholdsurveyquarter12014</a></td>
</tr>
</tbody>
</table>
Chronic Conditions Hub ([http://chronicconditions.thehealthwell.info/](http://chronicconditions.thehealthwell.info/))

**Hypertension Briefing**
[http://chronicconditions.thehealthwell.info/sites/all/libraries/tinymce/files/Hypertension_Briefing_18_May_2012_FINAL.pdf](http://chronicconditions.thehealthwell.info/sites/all/libraries/tinymce/files/Hypertension_Briefing_18_May_2012_FINAL.pdf)

**Stroke Briefing**

**Diabetes Briefing**

**Coronary Heart Disease Briefing**

Citizens Information Board ([www.citizensinformationboard.ie](http://www.citizensinformationboard.ie))

**Information in Transition: The information, advice and advocacy needs of older people in the technology and information age (2013)**

**Citizens Information Services Survey 2008**

Department of Children and Youth Affairs ([www.dcy.gov.ie](http://www.dcy.gov.ie))

**Child Cohort Publications**

**Infant Cohort Publications**

**State of the Nation’s Children Report 2012**

Department of Education and Skills ([www.education.ie](http://www.education.ie))

**Data on Individual Schools (2013/2014)**

**List of DEIS schools**

**Results of the Department of Education and Skills ‘Lifeskills’ Survey, 2012**
The Prevalence and Impact of Bullying linked to Social Media on the Mental Health and Suicidal Behaviour Among Young People


Department of Health (www.dohc.ie)

All Ireland Traveller Health Study, Our Geels, The Birth Cohort Study Follow Up

http://www.dohc.ie/publications/pdf/AITHS_Birth_Cohort_follow_up.pdf?direct=1

Acute Hospital Services


Community Health and Welfare Services, Health Statistics, 2008

http://www.dohc.ie/statistics/pdf/stats08_comm.pdf?direct=1

Health in Ireland, Key trends 2013


Health Status and Lifestyle, Health Statistics, 2008


Psychiatric services, Health Statistics 2011


Services for People with Disabilities, Health Statistics 2011


Slán 2007 Main Report


Slán: Alcohol use in Ireland - A profile of drinking patterns and alcohol-related harm


Slán 2007: Dietary Habits of the Irish Population

http://www.dohc.ie/publications/pdf/slan_summary.pdf?direct=1

Slán: Injuries in Ireland, Findings from National Population Surveys


Slán: Mental Health and Social Well-being Report


Slán: Smoking Patterns in Ireland, Implications for policy and services

http://www.dohc.ie/publications/pdf/slan_smokingreport.pdf?direct=1


Tobacco Free Ireland
http://www.dohc.ie/publications/pdf/TobaccoFreeIreland.pdf?direct=1

Department of Justice and Equality ([www.justice.ie](http://www.justice.ie))

Report of the High Level Group on Traveller Issues

Department of Social Protection ([www.welfare.ie](http://www.welfare.ie))

Statistical information for social welfare services 2013

Health Protection and Surveillance Centre (HPSC) ([www.hpsc.ie](http://www.hpsc.ie))

HPSC Annual Report 2012
http://www.hpsc.ie/AboutHPSC/AnnualReports/File,14421,en.pdf

Health Research Board ([www.hrb.ie](http://www.hrb.ie))

Alcohol consumption in Ireland 2013

Annual Report of the National Intellectual Disability Database Committee 2012

Annual Report of the National Physical and Sensory Disability Database Committee 2012

Health Research Board Irish Psychiatric Units and Hospitals Census 2013

Psychological distress, mental health problems and use of health services in Ireland

Health Service Executive ([www.hse.ie](http://www.hse.ie))

Child and Adolescent Mental Health Services Annual Report 2012-2013

Health Status of the Population of Ireland 2008

Report from the National Conference HSE West- Addressing the Mental Health Needs of Minority Ethnic Groups and Asylum seekers in Ireland
<table>
<thead>
<tr>
<th>Source</th>
<th>Website</th>
</tr>
</thead>
</table>
| Houses of the Oireachtas (www.oireachtas.ie/parliament) | Obesity – a growing problem?  
| United Nations Economic Cooperation for Europe (http://w3.unece.org) | Country Profiles  
4. Websites Classified According to Presentation of Data: Mapped or With Datasets

4.1 Mapped Data

Maps are useful if data on the population at the electoral division or Small Area level is needed. The following websites offer an interactive map tool which illustrates the geographical variation in the parameters measured in the 2011 Census. Some of these provide direct access to the dataset for any chosen area. These websites are listed here and it is indicated which ones include area datasets. The search terms used to find additional maps from websites not listed above are presented in Section 3 of Part B.

**AIRO (www.airo.ie)**

Selected datasets are available for download as CSV and SHP formats from the AIRO Data Store.

**Rol 2011 Census Mapping Viewer**
http://www.airo.ie/mapping-resources/airo-census-mapping

On this page maps at National, Regional, and Local Authority levels are available.

For the National Mapping Viewer, the mapping layers listed, which correspond to selected tables from SAPMAP (see Table 1), are population, religion, nationality, education, social class, principal economic status, industry of employment, occupation, housing, cars per households, transport, communications, health and disability. Electoral divisions or Small Areas are colour coded according to raw counts, percentages, ratios. For example, selection of a mapping layer such as ‘health’ and the indicator under it such as '% Social Class 1 (Professional Workers)' would give areas colour coded according to the proportion of professional workers. Clicking on a specific area will open a pop up that provides the raw counts and proportion of professional workers in the area, together with bar graphs.

For Regional Census Modules, different regional areas such as ‘West’ can be selected to give maps limited to that area. Other than census data, additional data such as the Pobal-HP deprivation index, and accessibility to amenities such as airports, health services, education and retail services are available. Only data for the electoral division level is available, and raw counts but not proportions are given. The Local Authority Census Modules is similar to the Regional Census Modules, apart from the fact that maps are limited to a specific Local Authority area.

**The Atlas of the Island of Ireland**
http://airomaps.nuim.ie/flexviewer/?config=AI_Atlas.xml

This is one of the maps under the ‘National Mapping’ section and is developed by the All-Island Research Observatory, NUI Maynooth and the International Centre for Local and Regional Development (ICLRD). Data is only available at the level of Small Areas. The proportion of people in each ethnic group is available, and the deprivation index used is the ICLRD All-Island Deprivation Index.

Other mapping resources, such as the All-Island Deprivation Index Mapping Viewer for Small Areas, can be viewed at http://www.airo.ie/mapping-resources/airo-census-mapping.
Central Statistics Office (www.cso.ie)

SAPMAP
http://census.cso.ie/sapmap/
Many geographical boundaries are available for selection, such as Regional Authorities, Garda Areas, Electoral Divisions and Small Areas. Pinpointing an area gives 2011 Census data in the form of tables. Please see case study in Part B for an example of using the interactive map (SAPMAP). Datasets are provided.

Pobal (www.pobal.ie)

Pobal Maps
http://maps.pobal.ie/
Electoral divisions are colour coded according to percentages in terms of population change, age dependency ratio, lone parent ratio, primary education only, third level education, unemployment of males or females, local authority rented housing, and the population accessibility index. Selecting the Pobal HP deprivation indices layer, either for electoral divisions or Small Areas, gives areas colour coded according to their relative affluence. Datasets are available from areas profiles of the Trutz Hasse website (http://trutzhaase.eu/deprivation-index/area-profiles).

The Health Well (www.thehealthwell.info)

Community Profiles
http://www.thehealthwell.info/community-profiles?source=hometabs
National prevalences for each indicator in each special theme can be exported as a CSV file. For more information on The Health Well see Section 1 above.

4.2 Other Datasets which do not have Maps

SAHRU (www.sahru.tcd.ie)

SAHRU index EDs
http://www.sahru.tcd.ie/services/deprivation.php
A request for a dataset regarding the National Deprivation index for 2011 developed by the Small Area Health Research Unit in Trinity College Dublin can be made at this link.
Part B: Case Study Illustration

This case study gives an example of how the resources identified and described in this booklet can be used to define and describe the target population proposed. In our case study we need to define the population in disadvantaged areas of Galway city who are 40 years and older, those aged 25-39 years in ethnic minority groups, and those with conditions that increase the risk of T2D (such as cardiovascular disease, hypertension, obesity, stroke, polycystic ovary syndrome, a history of gestational diabetes and mental health problems).

Relevance of government and government related resources for defining target population in our case study

- To identify which areas of Galway City are disadvantaged.
- To describe the health, social, economic, and demographic characteristics of the population in these areas.
- To establish what is known on the prevalence of diabetes and risk factors for diabetes in these areas.
- To estimate the number of people eligible for diabetes risk screening.

1. Application of Information from Relevant Websites Listed in Part A to Define the Population Characteristics of the Target Population

We used the Government and Government-related websites identified and listed in Part A to find information on the target population in our Case Study.

Data from the CSO’s SAPMAP (http://census.cso.ie/sapmap) and the Trutz Hasse website (http://trutzhaase.eu) available as a link from the Pobal website (www.pobal.ie) were important sources of information on the demography, socioeconomic status and health of the population in the disadvantaged electoral divisions.

A document ‘Area Profile for Galway City’ was available on the Trutz Hasse website, providing information on the most disadvantaged areas of Galway City based on their Relative Pobal HP Deprivation Index Scores. It named Newcastle, Mervue, Shantalla and Lough Atalia as being the most disadvantaged electoral divisions with Relative Index Scores of -7.0, -5.4, -4.6 and -0.4 respectively, where more negative scores indicate that the area is more disadvantaged. A comparison of electoral divisions by dimensions such as education, unemployment, and housing was also provided.

For each disadvantaged electoral division, SAPMAP provided information on the number of persons by sex and age group. This was useful in determining the number of males and females over the age of 40. Furthermore, for each electoral division, the number of people in each ethnic group, social class, and health status group together with the total number of
persons were used to arrive at the proportion of people in each group using data from SAPMAP.

We provide an example of using the CSO’s SAPMAP interactive tool to extract data on a selected ED:

**Example: using the CSO SAPMAP interactive tool to extract data on a selected ED**

The SAPMAP tool allows the user to zone in on a geographical unit e.g. city or electoral division (ED) or Small Area, highlight this on the map and extract the population data in the desired format. Figure 3 shows a selected electoral division (ED) highlighted using the interactive SAPMAP tool on the CSO website ([http://census.cso.ie/sapmap/](http://census.cso.ie/sapmap/)).

Data derived from the Trutz Hasse website and SAPMAP, on the demography, socioeconomic status and health of the population in the disadvantaged electoral divisions, is presented in Table 2:
## Description of Population Characteristics of Disadvantaged Areas in Galway City

<table>
<thead>
<tr>
<th>Age and Sex</th>
<th>Newcastle</th>
<th>Mervue</th>
<th>Shantalla</th>
<th>Lough Atalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of people</td>
<td>1,820</td>
<td>1,796</td>
<td>1,785</td>
<td>920</td>
</tr>
<tr>
<td>Total number of males</td>
<td>831</td>
<td>889</td>
<td>888</td>
<td>427</td>
</tr>
<tr>
<td>Total number of females</td>
<td>989</td>
<td>907</td>
<td>897</td>
<td>493</td>
</tr>
<tr>
<td>Total number of males aged 40+</td>
<td>407</td>
<td>441</td>
<td>484</td>
<td>229</td>
</tr>
<tr>
<td>Total number of females aged 40+</td>
<td>481</td>
<td>509</td>
<td>469</td>
<td>273</td>
</tr>
<tr>
<td>Total number of people aged 40+</td>
<td>888</td>
<td>950</td>
<td>953</td>
<td>502</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity (%)</th>
<th>Newcastle</th>
<th>Mervue</th>
<th>Shantalla</th>
<th>Lough Atalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Irish and other white</td>
<td>90.5</td>
<td>94.6</td>
<td>90.1</td>
<td>95.9</td>
</tr>
<tr>
<td>White Irish Travellers</td>
<td>3.81</td>
<td>0.688</td>
<td>0.284</td>
<td>0.656</td>
</tr>
<tr>
<td>Black or Black Irish or Asian or Asian Irish</td>
<td>3.53</td>
<td>1.89</td>
<td>2.33</td>
<td>1.97</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proportion of Population in each Social Class (%)</th>
<th>Newcastle</th>
<th>Mervue</th>
<th>Shantalla</th>
<th>Lough Atalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-manual and skilled manual workers</td>
<td>25.9</td>
<td>31.6</td>
<td>21.3</td>
<td>37.9</td>
</tr>
<tr>
<td>Professional or managerial and technical workers</td>
<td>20.1</td>
<td>23.7</td>
<td>21.3</td>
<td>34.0</td>
</tr>
<tr>
<td>Semi-skilled and unskilled workers</td>
<td>14.1</td>
<td>20.7</td>
<td>12.8</td>
<td>12.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Population by general health and sex (%)</th>
<th>Newcastle</th>
<th>Mervue</th>
<th>Shantalla</th>
<th>Lough Atalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good or very good</td>
<td>81.6</td>
<td>82.6</td>
<td>68.5</td>
<td>85</td>
</tr>
<tr>
<td>Fair</td>
<td>13.7</td>
<td>13.3</td>
<td>15.7</td>
<td>12.5</td>
</tr>
<tr>
<td>Bad or very bad</td>
<td>3.24</td>
<td>1.67</td>
<td>5.77</td>
<td>1.52</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lone Parent Ratio (%)</th>
<th>Newcastle</th>
<th>Mervue</th>
<th>Shantalla</th>
<th>Lough Atalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>27.2</td>
<td>24.5</td>
<td>26.1</td>
<td>25.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2011 Proportion with primary education only (%)</th>
<th>Newcastle</th>
<th>Mervue</th>
<th>Shantalla</th>
<th>Lough Atalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population with third-level education (%)</td>
<td>22.0</td>
<td>21.5</td>
<td>27.1</td>
<td>34.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2011 Unemployment rate (%)</th>
<th>Newcastle</th>
<th>Mervue</th>
<th>Shantalla</th>
<th>Lough Atalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>33.6</td>
<td>26.6</td>
<td>28.3</td>
<td>22.4</td>
</tr>
<tr>
<td>Females</td>
<td>23.3</td>
<td>16.1</td>
<td>15.8</td>
<td>12.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2011 Proportion of Local Authority rented in all Permanent Private Households (%)</th>
<th>Newcastle</th>
<th>Mervue</th>
<th>Shantalla</th>
<th>Lough Atalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.4</td>
<td>4.6</td>
<td>7.1</td>
<td>1.5</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Description of Population Characteristics of Disadvantaged Areas in Galway City.
In addition, the following government or government related websites provided information relevant to Galway City:

- **Health Service Executive** ([www.hse.ie](http://www.hse.ie))

- **Social Inclusion Division** ([www.socialinclusion.ie](http://www.socialinclusion.ie))
  o Reports on Galway City such as the ‘Galway City Partnership Lone Parent Report’ and the ‘Community Profile of Supports and Services for Older People’ are available in the ‘Local Focus’ section.

- **Galway City council** ([www.galwaycity.ie](http://www.galwaycity.ie))
  o The recreation and leisure section provides information on the locations of public parks and sports and recreational facilities.
2. Application of Information from Relevant Websites Listed in Part A to Establish what is known on the Prevalence of Diabetes and Risk factors for Diabetes in Disadvantaged Areas

Table 3 presents the use of government and government related websites to find information on the prevalence of diabetes and risk factors for diabetes (cardiovascular disease, hypertension, obesity, stroke, polycystic ovary syndrome, a history of gestational diabetes and mental health problems) in disadvantaged areas.

<table>
<thead>
<tr>
<th>Website</th>
<th>Relevant information</th>
</tr>
</thead>
</table>
| **Department of Health**              | - The publication ‘Survey of Lifestyle, Attitudes and Nutrition in Ireland (Slán 2007) Main Report’ provides a general overview of the Irish population in terms of general health, mental health, physical activity and diet and nutrition for example. The results of the survey are presented according to gender, age group, and social class.  
- ‘Slán 2007: Dietary Habits of the Irish Population’ provides information on the prevalence of obesity by gender, age group, and social class.  
- The publication ‘Health in Ireland, Key Trends 2013’ provides the admission rate per 100,000 population by age group into psychiatric hospitals and units.  
- The publication ‘Slán: Mental Health and Social Well-being’ provides prevalence figures for those with mental health problems by gender, age and residential location (urban or rural). |
| **Chronic Conditions Hub**            | - The national prevalence of diabetes for those aged 45 years and above is available in the publication ‘Diabetes Briefing’  
- The publications ‘Coronary Heart Disease Briefing’, ‘Stroke Briefing’, and ‘Hypertension Briefing’ provide the prevalence figures for the respective conditions. |

Table 3: Relevant websites from Part A providing information on the prevalence of diabetes and risk factors for diabetes.
3. Results of Google Search for Other Relevant Organisations and Information

To complete the search we conducted a Google search to find non-governmental organisations in Galway City and other information on our target population that might have been missed. The following searches were conducted (for all of the websites searched, the results were limited to the domain .ie):

<table>
<thead>
<tr>
<th>Google Search Phrase used</th>
<th>Number of Results Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Diabetes&quot; AND &quot;Galway City&quot; AND &quot;Electoral division&quot; OR &quot;Electoral divisions&quot; OR &quot;Electoral district&quot; OR &quot;Electoral districts&quot; site:.ie</td>
<td>112</td>
</tr>
<tr>
<td>&quot;Lifestyle&quot; OR &quot;Lifestyles&quot; AND &quot;Galway City&quot; AND &quot;Electoral division&quot; OR &quot;Electoral divisions&quot; OR &quot;Electoral district&quot; OR &quot;Electoral districts&quot; site:.ie</td>
<td>228</td>
</tr>
<tr>
<td>&quot;Dietary Factor&quot; AND &quot;Galway City&quot; AND &quot;Electoral division&quot; OR &quot;Electoral divisions&quot; OR &quot;Electoral district&quot; OR &quot;Electoral districts&quot; site:.ie</td>
<td>NIL</td>
</tr>
<tr>
<td>&quot;Deprivation index&quot; OR &quot;Deprivation Indices&quot; AND &quot;Ireland&quot; - pobal site:.ie</td>
<td>1,550</td>
</tr>
<tr>
<td>&quot;Polycystic ovary syndrome&quot; AND &quot;Prevalence&quot; AND &quot;Ireland&quot; site:.ie</td>
<td>116</td>
</tr>
<tr>
<td>&quot;Diabetes&quot; AND &quot;Ireland&quot; AND &quot;Organisation&quot; site:.ie</td>
<td>384,000</td>
</tr>
<tr>
<td>&quot;Independent Organisation&quot; and &quot;Galway City&quot; site:.ie</td>
<td>182</td>
</tr>
</tbody>
</table>

Table 4: Google search phrase used and the number of results returned.

Results identified as being relevant

Lifestyle

- CONSENSUS: This is a website on food consumption and lifestyle behaviour in Ireland http://www.consensus.ie/lifestyle-survey/
- Community Profile of Supports and Services for Older People in Galway City http://www.socialinclusion.ie/documents/CommunityProfileofSSforOlderPeopleinGalway.pdf
- Symposium on ‘Influence of social and cultural variations on diet’, Effect of social variation on the Irish diet

1 The Pobal-HP Deprivation Index was excluded from the search as its existence was already known through the Pobal website obtained from gov.ie.
2 The prevalences of gestational diabetes and polycystic ovary syndrome in Ireland were not available from government or government related websites. The prevalence of the gestational diabetes in Ireland is available in the journal article ‘The prevalence and outcomes of gestational diabetes mellitus using new diagnostic criteria’.
3 The limitation was that we viewed only the first 100 results as there were a huge number of results.
Deprivation Indexes in use in Ireland

- Small Area Health Research Unit (SAHRU): The National Deprivation Index For Health & Health Services Research
- SAHRU: The National Social Fragmentation Index For Health & Health Services Research
  http://www.sahru.tcd.ie/services/deprivation/deprivationfiles/socialfragmentationreport2013.pdf
- SAHRU: Deprivation Index download
  http://www.sahru.tcd.ie/services/deprivation/deprivation_download.php
- AIRO Mapping Resources providing a map on the All-Island Deprivation Index for Small Areas; the index is a consistent measure of deprivation for the Republic of Ireland and Northern Ireland
  http://www.airo.ie/mapping-resources/airo-census-mapping/national-viewers/atlas-island-ireland

Prevalence of polycystic ovary syndrome

- Irish Medical Times: Polycystic ovary syndrome

Non-governmental organisations

- Diabetes Federation of Ireland
  www.diabetes.ie
- FLAC list of non-governmental organisations in Ireland
  http://www.flac.ie/publications/links/independentnongovernmentalorganisationsireland/
  - Manual screening of the above list does not identify any relevant organisation providing information on the target population in Galway City.
- Family and Child Support (FACS) listing
  http://facs.gcp.ie/city/galway/listing/page/60/?directory_sortby=date_asc
  - Within this list, the following relevant organisations were found:
    - CROI, a charity dedicated to fighting heart disease and stroke in the region
      www.croi.ie
    - The Ballybane Mervue Local Community Development Office of Galway City Partnership, which provides drop-in services for people from the community seeking advice on a range of issues
      http://gcp.ie/programmes-supports/support-for-communities/communities-by-area/ballybanemervue/
- Directory of National Voluntary Organisations and Other Agencies by the Citizens Information Board
  Manual screening of the directory does not reveal any relevant organisation providing information on the target population in Galway City.

Actions taken

- The Diabetes Federation of Ireland was emailed to enquire on current estimates of diabetes prevalence. We were referred back to the Chronic Conditions Hub.
- CROI was emailed to enquire if health data about the community (such as the BMI and cholesterol levels) are available from the programmes conducted, such as 'CROI MyAction' and cardiovascular screening. A Croi MyAction paper and Heart Smart report which details the cardiovascular risk factor profile of the population of the west of Ireland was obtained.
4. Enquires made to Relevant Agencies to find unpublished information on the Health and Socioeconomic status of Galway City residents

As most of the publications retrieved from the relevant websites (see Section 3 of Part A) present information at a national and regional level, the next step was to contact the relevant agencies, either per email, phone or in person to ascertain if they had unpublished information on the target population in Galway city. Trutz Hasse and the Institute of Public Health in Ireland were not contacted as the information provided was sufficient to define the target population in the disadvantaged areas. Although the Central Statistics Office’s SAPMAP already provides demographic data on the disadvantaged areas, we lacked information on the health of the population in the disadvantaged areas. Hence, an enquiry was made to the office to see if any unpublished population health data, preferably at the electoral division level, was available. Tables 5 and 6 summarise the outcomes of our enquiries.

<table>
<thead>
<tr>
<th>Contact type: Email</th>
<th>Outcome of Enquiry About Target Population</th>
</tr>
</thead>
</table>
| Central Statistics office www.cso.ie | - Publication of a Quarterly National Household Survey which provides population data at national and regional authority level. National Disability Survey publication is also published.  
- The 2011 Census of Population provided information under 15 themes down to the level of electoral divisions and Small Areas. Three of the questions asked in the 2011 census (questions 16, 17 and 18) related to health.  
- Disaggregated data on the number of people aged 25–39 of South Asian, Chinese, African-Caribbean, black African and other high-risk black and minority ethnic groups is not available due to the 1993 Statistics Act which protects the privacy of anyone completing a survey form or census. |
| Department of Health www.dohc.ie ✔ | - Publications of population health reports in various target groups, providing data at national and regional authority level. No information on disadvantaged areas in Galway city.  
- The national health survey Survey of Lifestyle, Attitudes and Nutrition in Ireland (SLAN 2007) dataset was obtained to conduct our own analysis. |
| Health Service Executive www.hse.ie | - Clinical data such as history of diabetes and blood glucose levels of residents in Galway City is not recorded by the Department of Public Health  
- Number of medical card holders or percentage of people who have a high BMI in each Electoral Division in Galway City was also not recorded by the department. |
| Department of Environment, Community and Local Government www.environ.ie ✔ | - The areas of Galway City that were under the RAPID programme, which targeted the most disadvantaged areas in the country, were Ballinfoile, Ballybane, Bohermore, New Mervue and Westside.  
- RAPID programme had been discontinued in 2012. |

Table 5: Agencies contacted and outcomes of enquiry. ✔ indicates that useful information to define the target population had been obtained from the enquiry.
<table>
<thead>
<tr>
<th>Contact type:</th>
<th>Outcome of Enquiry About Target Population</th>
</tr>
</thead>
</table>
| Social Welfare Local office (Department of Social Protection) www.welfare.ie | - No local data was available.  
- Referred back to Central Statistics Office. |
| Galway Citizens Information Centre www.citizensinformation.ie | - No information profile about those who came in was collected. |
| Galway City council www.galwaycity.ie | - The only information collected by the Corporate Services Division is through the Register of Electors i.e. the number of people over 18. |
| Galway Local Health Office (Health Service Executive) www.hse.ie | - Health data of Galway City residents is not available. |

Table 6: Agencies contacted and outcomes of enquiry.
5. Using Information Obtained To Calculate the Target Population Eligible for Diabetes Risk Screening

Having established the demographic profile and what is known on the prevalence of diabetes and risk factors for diabetes in the disadvantaged areas, we will proceed to calculate the target population eligible for diabetes risk screening. The target population eligible for diabetes risk screening would be those living in the disadvantaged areas of Galway city, who are 40 years and older, or aged 25-39 years in ethnic minority groups, or with conditions that increase the risk of T2D.

Other than calculating the numbers eligible for screening, we will calculate the number of people within the target population who are likely to have a high risk of diabetes and hence require an intensive lifestyle intervention. We will also calculate the number of people within the target population with undiagnosed diabetes which would require diabetes management.

Number of people above 40 years of age

Data from the Central Statistic Office’s SAPMAP was used to calculate the number of people above 40 years of age for each of the four electoral divisions identified as disadvantaged (see Table 2 for calculation and Figure 4 for an example of data provided by SAPMAP).

![Figure 4: Screenshot of data on the population by sex and age group in the electoral division of Newcastle (Source: SAPMAP).](image)

School of Medicine, National University of Ireland, Galway
Number of people aged 25-39 years in ethnic minority groups

Ideally, we would also like to know the number of people aged 25-39 years in ethnic minority groups. But disaggregated data is not available. We only have aggregated data where the number of people in each age group, and the number of people by ethnic or cultural background is known. However, the number people aged 25-39 years in ethnic minority groups are insignificant. For example, in Newcastle, Mervue, Shantalla, and Lough Atalia, the total proportion of those in ethnic minority groups (Asian Irish, Asians, Black Irish, and Blacks) are only 3.53% (63), 1.89% (18), 2.33% (41) and 1.97% (33) respectively.

Number of people with conditions that increase the risk of T2D

The number of people over 40 years of age with conditions that increase the risk of T2D are already included in the calculation of the population over 40 years of age. As the risk of T2D increases with age, the numbers of those below 40 with risk factors for diabetes are not likely to contribute substantially to the numbers we need to target for diabetes risk assessment. According to the publication ‘Diabetes Briefing’, 0.5% of those aged 18-34 years and 1.1% of those aged 35-44 years have diabetes. In comparison, for those aged 45-54, 55-64, 65-74, and 75+ years, 4.9%, 10.9%, 11.4% and 11.5% have diabetes respectively. This shows that age is an important risk factor for diabetes.

Application of prediabetes/ T2D prevalence figures to determine numbers eligible for diabetes risk assessment/ estimate numbers having a high risk of diabetes or having undiagnosed diabetes

The exclusion criterion for diabetes risk assessment would be those with clinically diagnosed diabetes. Hence, the number of people eligible for diabetes risk assessment would be those over 40 years without diabetes and living in disadvantaged areas.

According to the publication ‘Diabetes Briefing’, in 2010, 6.2% of adults aged 45 and over had clinically diagnosed diabetes in the previous 12 months. On the other hand, 2.7% had undiagnosed diabetes. The prevalence of pre-diabetes was 19.8% from our literature review. For this case study we would assume that the prevalence figures for those aged 40+ is the same as those aged 45+.

The prevalence estimates for clinically diagnosed diabetes, prediabetes, and undiagnosed diabetes were applied to the numbers above 40 years in each electoral division to calculate the number of people eligible for diabetes risk assessment and estimate the number of people who would have prediabetes or undiagnosed diabetes.
<table>
<thead>
<tr>
<th>Electoral Division</th>
<th>Number of people aged 40+ (N)</th>
<th>Number of people with clinically diagnosed diabetes (N x 6.2%)</th>
<th>Target population eligible for diabetes risk assessment (N x 93.8%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newcastle</td>
<td>888</td>
<td>55</td>
<td>833</td>
</tr>
<tr>
<td>Mervue</td>
<td>950</td>
<td>59</td>
<td>891</td>
</tr>
<tr>
<td>Shantalla</td>
<td>953</td>
<td>59</td>
<td>894</td>
</tr>
<tr>
<td>Lough Atalia</td>
<td>502</td>
<td>31</td>
<td>471</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,293</strong></td>
<td><strong>204</strong></td>
<td><strong>3,089</strong></td>
</tr>
</tbody>
</table>

Table 7: The target population eligible for diabetes risk assessment in identified disadvantaged areas.

<table>
<thead>
<tr>
<th>Electoral Division</th>
<th>Target population eligible for diabetes risk assessment (n)</th>
<th>Number of people with prediabetes (n x 19.8%)</th>
<th>Number of people with undiagnosed diabetes (n x 2.7%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newcastle</td>
<td>833</td>
<td>165</td>
<td>22</td>
</tr>
<tr>
<td>Mervue</td>
<td>891</td>
<td>176</td>
<td>24</td>
</tr>
<tr>
<td>Shantalla</td>
<td>894</td>
<td>177</td>
<td>24</td>
</tr>
<tr>
<td>Lough Atalia</td>
<td>471</td>
<td>93</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,089</strong></td>
<td><strong>611</strong></td>
<td><strong>83</strong></td>
</tr>
</tbody>
</table>

Table 8: Numbers with prediabetes and undiagnosed diabetes in identified disadvantaged areas.
6. Diabetes Websites

The following lists relevant websites for information on diabetes.

**American Diabetes Association**

http://www.diabetes.org/
This is a United States-based association providing useful information about diabetes, such as Clinical Practice Recommendations.

**Centers for Disease Control and Prevention (CDC)**

Diabetes Public Health Resource
http://www.cdc.gov/diabetes/
This website provides information about diabetes data and trends in the United States.

**Diabetes Federation of Ireland**

http://www.diabetes.ie

**International Diabetes Federation**

http://www.idf.org/