

POPULATION PROJECTIONS WORKING GROUP (PPWG)

Health Board Use of GRO(S) Population Projections

Introduction

At the first meeting of the Population Projections Working Group (PPWG), it was agreed to seek the views of users within health boards as to the uses made of the data and, in general, where improvements could be made to the content of the published information. To this end, a questionnaire was sent out to health board chief executives. A copy of the questionnaire is attached as Appendix B. In total, 8 responses were made.

Respondents

The questionnaire was sent to all Scottish health boards and responses were made by:

- Ayrshire & Arran
- Borders
- Fife
- Grampian
- Greater Glasgow
- Lothian
- Tayside
- Western Isles

Questionnaire

The questionnaire was designed to find out what uses were made of the population projections, whether authorities produced their own projections/forecasts, whether more regular or longer term projections would be useful and whether projections for other geographical areas would be desirable. The section dealing with the uses made of the data was left open, rather than suggesting possible uses. Because of this, some uses are generalised whilst others are very specific. Respondents were also invited to make any other comments on the population projections. Appendix A lists these comments in full.

Results

1. Uses made of the population projections

Table 1 below summarises the uses made by responding health boards. Exact responses have been grouped together, but these groups may not be exclusive.

Table 1. Use Made of GRO(S) Population Projections

Use Made	No. of responses	% all responses
Examining Situation re Government funding	1	12.5
Input to own projections (e.g. of disease incidence, future admission rates)	5	62.5
Put boards into context	1	12.5
Service planning	6	75
Reports, briefings etc	4	50
Information for development of bids	1	12.5
Community health profiles	1	12.5
Service development	1	12.5
Public consultation	1	12.5
Resource modelling	2	25
Estimating service utilisation rates	1	12.5
Build population profiles	1	12.5
Current / long term view of population's health	1	12.5

2. Do you prepare your own population projections/forecasts?

5 of the 8 respondents regularly, or have in the past, prepared their own population projections or forecasts. All of these use GRO(S) projections in preparing their own figures. The geographical level at which these projections were prepared were:

Council Area	(1)
Community Health Partnerships (CHPs)	(3)
Care co-operatives (now obsolete)	(1)
Major sub-divisions of councils	(1)

3. At present, GRO(S) population projections cover a 20 year period. Would you prefer the projections to cover a longer period?

Only 1 of the 8 respondents said that they would prefer the projections to be made over a longer time period with many of the remainder mentioning the decreased accuracy of projections further into the future.

4. Would you prefer the projections to be carried out annually rather than every 2 years?

6 of the 8 respondents said that they would prefer the projections to be carried out annually rather the current system of production every 2 years.

5. If it were possible, would you prefer population projections for other geographical areas?

7 of the 8 respondents said that they would like to see projections published for other geographical areas including:

Datazones (or aggregations of)	(5)
Community Health Partnerships (CHP)	(3)

Local management units	(1)
Postcode district	(1)

6. Summary of other comments

Other comments made on the population projections are listed in full in Appendix A. recurring themes in the comments include:

1. The need to improve migration assumptions
2. A desire for annual projections and projections for smaller area

Appendix A: Further Comments of Respondents

“Right For Fife made extensive use of population projections, not only to take account of demographic change but also to underpin our own forecasting system for projecting patient activity and bed use (by speciality, by patient category, by age and by gender). This model has also been used by other Health Boards. GRO(S) Projections by the old LA districts were also used in Right For Fife and other strategic work.”

“Much of the planning and policy work that we carry out is in partnership with Community Planning Partners and often relates to geographic areas (and population sub groups) at a smaller geographic area than, eg. as mentioned above Community Health Partnerships and Local Management Units/Local Childrens Services Groups CHPs and LMUs are all based on datazones. Annual population projections for the sub-CHP geographies would be very useful and we would welcome the opportunity to explore the validity and feasibility of producing these projections.”

“It would be useful to see projections based on natural change alone. The birth and death processes are easier to model than migration, and may give more realistic forecasts. Net migration is usually small, but because it has to be estimated from the difference of two much larger numbers (inward migration and outward migration) it is subject to relatively large standard error. Also, high net migration tends to be self-limiting because of its affect on the housing market - increasing population put upward pressure on house prices and discourages further immigration, and conversely for falling population. There must also be similar negative feedback effects on migration due to the employment market - for every person who leave a job to migrate to another area, so long as the original job still exists it is likely to attract immigration to fill it, indirectly if not directly.”

“Note that the 2004-based projections for Aberdeen City has the population decreasing by more than 1% a year for the next twenty years, whereas it is rare in practice for population to change by this rate in even a single year let alone a block of 20 consecutive years. This is due to the high migration assumptions that have been made for Aberdeen.”

“Population projections are extremely important for planning purposes. Although the mid year estimates are used in resource allocation at a macro level, future trends are an important consideration in Health Board planning.”

“I have two main problems with population projections:

- a broader formula is needed in constructing the projections. This could take into account Local Authority projections which are influenced by local intelligence, e.g. business developments*
- projections (and mid-year estimates) are based on the census. If (and when) there are problems with the census, the projections need to take this into account (e.g. under-recording).”*

“My role as information provider includes satisfying requests by various senior members of NHS Greater Glasgow and Clyde who may be involved in service provision, projected population is also required for statistical health analysis at Council level as well as CHCP level. NHSGG&C is responsible for part council areas within its geographical boundary as well as whole council areas and Glasgow City alone serves five CHPs, therefore projected population at data zone level, perhaps if made available for persons by broad age groups would be widely used.”

All population figures from GRO (S), including projections, are routinely used in conjunction with a range of deprivation weighting tools etc in a variety of strategic planning, service redesign, resource allocation and performance management activities

"1) I don't think that we make enough explicit use of them though they should be an essential planning tool in all parts of the organisation both strategically and operationally 2) the projections are usually produced by local authority area which outside Glasgow coincides with our CHPs, In my new role as CHP Director it would be helpful to me if projections were circulated routinely by the new information and IT dept on routine basis (rather than leaving CHPs to pick them up or not through other routes) ideally as part of core set of planning information produced for each CHP. Within Glasgow GRO at one time had produced i think small area projections which would be most helpful within Glasgow City for use by CHCPs - don't know if they still do or indeed if the council produces them. 3) annual production would be useful with flexibility of single year and five year age bands by gender."

"Our local attempts to project Community Health Index populations split by Community Health Partnerships (CHPs) forward using the published and available GRO methodologies and assumptions have not reconciled to published GRO Local Authority level figures. We have consistently produced higher local CHP populations as a result of applying the standard GRO methodologies."

"We have also tried to identify at CHP level how GRO projected population growth at Local Authority level might translate using information like new house building programmes at postcode level. We realize this approach is little more than a crude proxy – but given the age groupings where population growth is projected to take place – it has some face validity."

"Improve the forecasting of migration based on local authority housing expansion etc....."

Appendix B: Questionnaire

Name:

Health Board:

Department:

What use(s) does your NHS Board make of the GRO(S) population projections?

Please only refer to specific uses of the population projections, not mid-year population estimates or household estimates/projections.

- 1.
- 2.
- 3.
- 4.
- 5.

Do you prepare your own population projections/forecasts?

If Yes, at what geographical level?

Do you use the GRO(S) projections in the process?

At present, GRO(S) population projections cover a 20 year period. Would you prefer the projections to cover a longer period?

Would you prefer the projections to be carried out annually rather than every 2 years?

If it were possible, would you prefer population projections for other geographical areas?

If yes, which?

Any further comments: