



General Register Office for Scotland
information about Scotland's people

Paper NHSCR GB 3/07
Access to anonymised NHSCR data
for statistical purposes

May 2007

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1. Introduction

1.1 This paper proposes that anonymised extracts of the NHSCR database are made available for statistical work at the GROS office in Ladywell House and sets out the main benefits that such data access is likely to deliver.

1.2 GROS is responsible for carrying out the decennial Census of the population and produces estimates of the number of persons and households resident in Scotland for each year between the censuses. NHSCR data are currently used to measure migration in and out of Scotland and update census figures to derive population estimates for the inter-censal years. It also serves as a tracing tool for the Scottish Longitudinal Study, a research resource which links Census records and vital events registrations for a 5% sample of the Scottish population. Access to the data is provided via the NHSCR team and the NHS Scotland IT contractor, Atos Origin. Allowing direct access for GROS statisticians will improve the quality and efficiency of existing usage and enable feasibility work to explore the potential of the NHSCR data to inform other areas of work.

2. The proposal

2.1 This proposal envisaged that 6-monthly downloads of the NHSCR database containing all (?) fields held on the database (including postcode of residence) with the exception of patient name are made available to GROS staff in Ladywell House. The IT options for the implementation of this proposal are not yet fully developed. It is intended that the arrangement will be the subject of a formal data access agreement between GROS and NHS Scotland (?) specifying the purpose and conditions of data sharing between the two organisations (?).

2.2 The data will be held securely and separately from any other GROS data holdings. Access will be governed by a formal access control policy defining access levels for named individuals with proven business need. All outputs will be non-disclosive and statistical in nature.

3. Benefits

3.1 Direct processing and derivation of migrant flows into, out of, and within Scotland will deliver improvements for the production of **population estimates**. It will allow greater flexibility in responding to changes in the administrative system or in the statistical requirements, will help improve the timelines and quality of the data inputs and reduce pressures on the NHSCR team. It will also enable feasibility work into the future potential of the NHSCR to replace current use of the Community Health Index database, thus improving the overall efficiency of the process by relying on a single source of administrative health records.

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3.2. There are similar improvements to be gained for the **Scottish Longitudinal Study** (SLS). The SLS team will be able to investigate moves into and out of Scotland for members of the SLS sample in the years between the censuses exploiting the full potential of the NHSCR in this area. Migration data is currently one of the weaker areas of the SLS database and improvements can be made both retrospectively and prospectively without increasing the burden of requirements on the NHSCR team. The direct involvement of SLS staff in tracing sample members will improve the efficiency of the overall process while retaining patient confidentiality.

3.3 Direct access to the NHSCR database will contribute to the wider **research on administrative sources** that GROS undertakes. Ensuring adequate population coverage of the census enumeration is becoming increasingly difficult and costly, increasing the interest in the potential for a wider range of admin data to supplement or replace current sources. Administrative data can serve as

- a) a primary source of census information, by replacing census returns where there are particular gaps in the data collected by traditional means or by replacing traditional census taking altogether with a more efficient alternative system of population statistics ¹, or
- b) a supplementary source, by helping to assess the coverage that has been achieved and develop statistical adjustments where this is needed.

3.4 The ability to process anonymised NHSCR data in house will enable GROS to assess what role administrative health records can play in future censuses. It will also help assess their potential to support other relatively recent demographic outputs, such as the production of **household estimates**, and help develop improvements in this area.

GROS
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¹ See ONS proposal http://www.statistics.gov.uk/downloads/theme_population/ipss.pdf