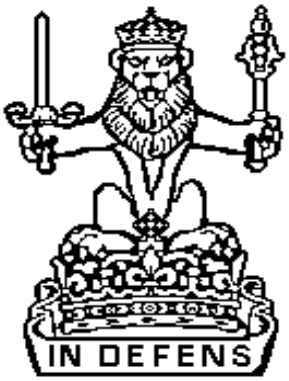

General Register Office for Scotland
information about Scotland's people

NHS Central Register (NHSCR) Performance Targets 2009-10 and Objectives 2010-11

July 2010

1. This paper describes the work of the NHSCR in 2009-10 and sets out its intended targets for 2010-11. The Board is invited to comment.

Performance Targets

2. The NHSCR has a range of performance targets and indicators to support the targets. The main throughput and indicators are set out in the tables below for years 2009-10 and (for comparison) 2008-09.

2009-10	Total Number of Requests/cases	Achieved on Time	%
NHS updates	1,069,645	1,072,667	100
Medical Research updates	702,649	702,649	100
Notification of Events to Researchers	45,461	45,461	100
Local government updates	32,335	32,335	100
Local government extracts (11 extracts)	342,537	342,537	100
General Register Office for Scotland (GROS)extract monthly updates ()			100
GROS extract download (2)	17,161,220	17,161,220	100
SLS Census Rehearsal	1,987	1,929	97
SLS Education Pilot	37,725		83.1
SLS Feasibility Study	2,500	2,500	100
SLS Events - 2008	21,718	19,683 SLS members	90.6

2008-09	Total Number of Requests/cases	Achieved on Time	%
NHS updates	944,754	931,459	99
Medical Research updates	1,157,826	1,157,826	100
Notification of Events to Researchers	59,491	59,481	100
Local government updates	126,036	126,036	100
Local government extracts (3 extracts)	337,905	337,905	100
GROS extract monthly updates (8)	7,686,071	7,686,071	100
GROS extract download (1)	8,488,748	8,488,748	100
SLS Education Pilot	38,379	32,011	84
SLS Feasibility Study	500 cases	593 cases	100
SLS re-run of 1991 – 2001 events	26,331	7,047 SLS members	26

Key Business Objectives 2009-10

3. As part of General Register Office for Scotland's (GROS's) corporate plan for 2009-12, the following high-level objective and target applies to the NHSCR:

Strategic Objective D: Maintain the security, integrity and accuracy of the personal information we hold, while increasing its usefulness for administrative purposes.

We are the secure custodians of large paper and electronic databases of personal information collected through the registration service, from Censuses and from the National Health Service Central Register (NHSCR).

Outcome: By working in concert with other government departments, we increase secure and acceptable sharing of data, resulting in greater joined-up and efficient delivery of services - including combating fraud.

4. For 2009-10, in addition to the routine performance targets reported above, the NHSCR had the following 'change' target:-

   By November 2009, establish a system to routinely provide information from the NHS Central Register to Scottish local authorities for the Citizen Account.

5. The objective was achieved: information is now passed routinely to the Improvement Service via an NHS N3 connection.

Customer Service in 2009-10

Efficiency Improvements

6. In March 2010, NHSCR took the opportunity to have an independent evaluation of its business processes.This has highlighted areas for potential improvements (e.g. in the average time taken to process documents).

7. NHSCR is continually working to streamline processes and improve the already efficient turnaround times of records requiring manual intervention, reducing the target outcomes from 95% within 6 weeks to 95% within 5 weeks of notification to NHSCR. We have moved to a position where we update the NHSCR database with 90% of records within 5 working days, 95% within 10 working days and 100% within 15 working days.

8. Much of this work has been in partnership with NHS National Specialist Services (NSS) and continued savings are expected through closer working. For example, the NHSCR computer system is operated and maintained within the NHS Scotland contract for national IT services.This arrangement adds little to the costs of the NHS contract, and is much less expensive than maintaining a separate arrangement for NHSCR.

9. Since the introduction in December 2007 of our updated computer system, the 'match first time' rate has improved considerably. We are continuing to carry out detailed analysis to assess the improvement to our service.

Personal Demographic Spine (PDS) – System in England and Wales

10. We are working with our IT providers to ensure continuity of service following the implementation of Personal Demographic Spine (PDS) in England and Wales in 2010. Some of the developments required to provide and receive data on cross border moves from PDS has been completed. We are waiting for Connecting for Health to provide definitive field instructions. Once we have these there are around 25 IT man days required to complete this work. This will include the change from Q codes to Back Office Location (BOL) codes, a 12 digit number. The facility for NHSCR to input the BOL code onto our system is now in place, which will in turn inform Community Health Index (CHI) and Community and Preventative Care (CPC) Systems. NHSCR is managing this function which results in considerable IT savings for NSS: we convert the code.

11. Work is now completed with Connecting for Health in providing evidence of NHSCR compliance with the PDS's information governance criteria. NHSCR staff have been registered and issued with smart cards to access PDS. To take into account of NSS targets for the movement of medical records envelopes, we are taking forward becoming 'spine compliant'.

Scottish Longitudinal Study (SLS)

12. As a pilot, SLS provided NHSCR with an extract containing 37,725 records of 2008 Pupil Census data. The disk contained date of birth, sex and postcode and the automatic match rate was 85% of whom 83% were SLS members. A sample of the matched non SLS members were checked and found to be people moving to Scotland from within the UK. There were also 579 sets of twins and 10 sets of triplets that were matched but of the same sex and a unique match was unable to be identified. Files containing the matched live, dead and unmatched records have been returned to SLS.

13. Work was carried out on a feasibility study to trace the family history of SLS members, in order to increase the period of the longitudinal information held by SLS. There were 2 aspects:-

    Pre 1939 – Extending the SLS back to 1939. The digitised 1939 transcript books have been used to trace the member and who else was also contained within the household. Details are entered onto a database, along with the relationship to the member and occupations. 2,000 cases have been completed with the basic details, and an extract of 500 of these have been chosen to further trace the members' birth, marriage, parents marriage, parents birth and deaths. The pilot was completed ahead of schedule in August 2009.

    1939 to 1974 – tracing parents/marriages/deaths. DIGROS (the GROS system which indexes vital events and links them to the digitised register entry) was used for this element of the study, tracing an SLS member, their birth, marriage, parents' marriage, parents' births and deaths. A minimum of 500 cases were requested to be completed by 31 March 2010; the actual number actioned by this date was 593. These have been returned to SLS and a presentation of the findings given by SLS to the Economic and Social Research Council (ESRC) in London with the objective to gain funding.

14. Data from the March 2009 Census Rehearsal was used to revisit procedures carried out following the 2001 Census and to test the process which will be used to add information on SLS members from the 2011 Census. The process from an NHSCR prospective would appear to be straightforward.

15. Each year, NHSCR identifies births, deaths and marriages affecting SLS members. Before the update with the 2008 events, SLS asked NHSCR to carry out manual amendments to a group of study members. Eight categories from the 2008 events were ran automatically against the NHSCR system and 4 categories manually traced. Members and Postings listings of the matched events who are also flagged SR172 were requested and forward to Vital Events branch. Files were returned to NHSCR of the non match cases and manual tracing carried out with a completion date of January 2010.

Data Quality CHI/NHSCR

16. As part of the on-going improvements to the content and quality of data held on the NHSCR database, 736,094 records held on the CHI system that were not on the NHSCR database were added in 2007. These fall into 4 categories and the category where the CHI database holds an invalid NHS number has been focused upon. To date we have resolved 138,975 (19%) of these cases. Following Phase 2 where middle name, place of birth and mothers birth surname were added to the NHSCR database, staff are continuing to populate these field for non-Scottish born patients.

17. In October 2009, following findings from an analysis of the GROS statistical extract, we undertook to investigate all persons on our database who are aged over 120 years old. There are 16,717 cases, of which the majority form part of the exercise when we added the missing CHI records in 2007. To date we have investigated and resolved 1,050 of these cases (6%).

18. In October 2009 Atos Origen (our IT provider) ran the CHI system against the NHSCR database and found that 27,966 records were on the CHI as deceased but no death details were recorded on NHSCR. Analysis carried out has identified that all these cases require manual investigation to establish if a death has been formally notified. At present only a formally-registered death is recorded on the NHSCR system and, if a death cannot be confirmed, a cancelled posting is added to NHSCR using the date of the death from the CHI system. An enhancement to the NHSCR database to capture non-formal deaths is expected to be in the July 2010 release. This will allow a cancelled posting to be added if a formal notification has not been registered within 21 days of the CHI being updated. This has resulted in NHSCR changing our handling for updating deaths.

Cancer Data

19. During the year, 1.2 million records were provided by Information Services Division (ISD) to update missing cancer registrations. Patient numbers were fed back to ISD and updates provided on patients who have moved to England and Wales. A patient number was added to the NHSCR system, and matching criteria were reviewed, to improve future linkage exercises.

20. On completion of the historic cancer update, files containing the monthly registrations were matched against the NHSCR system. Match rates have been averaging between 98% and 99%. All files up to and including October 2009 are completed and matched cases have been forwarded to ISD to obtain SMR06 data.

21. Throughout these updates, developments were continually being made to formalise and streamline the processes and ensure a robust system for the future. Specific work to improve the accuracy of the death data held on ISD systems by using manually verified information from the NHSCR is being progressed to a strategic level. In the near future we are looking to provide death information to the Scottish Health Informatics Programme (SHIP) and Scottish Health Information Service (SHIS) systems.

Citizens Account

22. The batch interface between NHSCR and Citizen's Account Scotland (CAS) was put in place in July 2009. This provides the Improvement Service (IS) with regular downloads of updates made to the register.

NHSCR Update to CAS - Extract Counts 2009 - 2010				
	Number of Records			
Date of Run	Added	Deleted	Updated	Total
16/04/2009	47,117	618	23,533	71,268
13/07/2009	33,955	327	15,586	49,868
13/08/2009	9,922	97	5,737	15,756
09/09/2009	12,654	107	6,513	19,274
15/10/2009	23,422	133	7,868	31,423
03/11/2009	13,192	84	4,333	17,609
13/11/2009	4,669	74	57,203	61,946
01/12/2009	7,166	108	5,905	13,179
05/01/2010	8,905	154	10,201	19,260
02/02/2010	10,969	247	11,031	22,247
02/03/2010	10,164	148	10,395	20,707
Total	182,135	2,097	158,305	342,537

23. Thirty two thousand Young Scots records were matched against the NHSCR database. We will return Unique Citizen Reference Numbers to the Improvement Service.

24. Using the secure NHS N3 introduced earlier this year, 970,604 records were updated with a Citizen Account Postcode and Unique Property Reference Number (UPRN) on the NHSCR database. There were 68,627 records where the Citizen Account postcode differed from the CHI postcode.These are being investigated and actioned as appropriate.

Ministry of Defence (MoD)

25. Work is under way to progress the implement of requirements of the Scottish Government and MoD and to allow access to health care systems for the provision of patient care for people serving in the armed forces and for veterans. The NSS/Practitioner Service Division (PSD) Director is taking the lead on this and NHSCR are acting in the role to identify people who need to be issued with Unique Patient Identifier (UPI)/Community Health Index (CHI) numbers. Colonel Beverly Bergman, on secondment to Scottish Government from MoD to take forward the work, sees it as "an excellent example of how military and civilian organisations can work together to achieve change that will improve health care".

26. This work has given NHSCR the opportunity to improve the completeness of our data, which will feed back into the CHI and associated systems. We have also set up formal, structured data feeds for death information. Both of these initiatives will have historic as well as ongoing benefits for all health care provision and for the quality of data on our respective systems. This work is ongoing.

Other Medical Research

27. Medical research work continues, albeit a smaller part of the NHSCR's task than it was 5 years ago. One novel application, however, requires the use of the NHSCR as a sampling frame for a research study.

Key Business Objectives 2010-11

28. For 2010-11, the NHSCR intends, subject to the conclusion of funding discussions with the NHS, to provide the same level of service for its routine work for its main customers. The following specific "change" targets are also intended:-

    1939 Information requests – Expand the interim procedure we have for providing information from the NHSCR 1939 Index to include details, by address, for individuals who are deceased, and to update our charging to fully recover the cost of our work.

    MoD Data – Improve death recording for serving Armed Forces personnel.

29. We aim to continue to improve the quality of data held on NHSCR and feed back to NSS/PSD, ISD and the IC (Southport). From April 2010, NHSCR staff have been adding patients to the NHSCR database from transfer prints, if additional information is required before a positive match can be made to identify a patient from the English/Welsh system. Only demographic data will be loaded and NHSCR will not supply PSD with the temporary NHS number used. On return from the PSD the record will be updated as appropriate and the NHS number returned. We have used this approach as the solution to ensure more correct details are held and allows us to introduce a monitoring process.

30. Work will also continue to improve the quality of the information on the NHSCR, and to maximise its potential use for data matching and for tracing of individuals, as well as for a possible use in a post-2001 census system for providing frequent and accurate demographic information.

General Register Office for Scotland
1 July 2010