



Types of Clinical and Administrative Users in QRESEARCH

*An analysis using QRESEARCH
for the Department of Health*

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EXECUTIVE SUMMARY

This work had a modest objective – to explore the way in which system users were recorded in QRESEARCH. The desired outcome is an understanding of how the identity of the users can facilitate examinations of workload and skill mix.

In this work we describe the top 10 categories of entries by users. 85% of all entries being made by users (as grouped by ourselves for this report) who are administrative staff, general practitioners and nurses. When we looked at the distribution of specific categories of users we found that the greatest number of users were locums and receptionists, with only 5.5% of users being principals in the practices. Since this measures “turnover” as well as numbers of staff, it is as expected.

The findings in this report suggest that QRESEARCH can be a powerful tool for examining workload and skill mix.

SPECIFICATION

The Department of Health's specification for the work reported in this document was:

“We would like to know more about the types of users which are recorded on the QRESEARCH database. This would help scope analyses of workload and skill mix”

OBJECTIVE

- To describe the different categories of users coded by practices on the database
- To explain the groupings which QRESEARCH have adopted.
- To discuss possible analyses which could be done on the database

METHODS

This study was conducted on the QRESEARCH pilot dataset drawn from 43 practices in October 2003.

Within the QRESEARCH database, there is a USERS table that contains one row for each clinical or administrative member of staff who has ever been assigned permission to use the EMIS computer system in each practice.

The identifier for each user (known as a GUID) is attached to all entries made by that user on the database. For example, if a user is a GP, then every diagnosis, clinical value, referral, consultation, prescription etc made by that GP is linked to that doctor's identifying code. This means it is possible to undertake analyses by individual user to look at workload, case mix, prescribing patterns etc. If the user is a nurse, then it is possible to examine nurse prescribing and use of diagnostic Read codes. It would not be possible, though, to ever identify an individual user from the information available.

Each user is also assigned to a category. There is a default picking list within the EMIS system which can be used with options such as GP Principal, practice nurse etc. The practice can add their own categories to this default list to tailor it to their own individual configuration of staff.

RESULTS

There are currently 149 different categories of staff recorded on the pilot version of the QRESEARCH database containing the data from 43 practices. We have grouped these into 6 mutually exclusive categories as shown in table 1.

Table 1 also shows the frequency so you can see how often these categories are used. It is important to remember that the table represents all users who have ever been

registered on the system [not just current users] and that these will change as staff changes occur over time. We can identify the first and last entry made by that user in order to determine the number and type of users within a practice at any one time

QRESEARCH grouping of users	Frequency	Column % of 3909
GP	978	25.02
GP trainee	132	3.38
On call doctor	25	0.64
External doctor [excluding those in the above 3 categories]	10	0.26
Nurse	844	21.59
Professions allied to medicine	228	5.83
Administrative staff	1,482	37.91
Pharmacist	10	0.26
Other	200	5.12
Total	3,909	100.00

Table one: Main categories of users on the pilot version of the QRESEARCH database using 43 practices

As expected, the most common category is administrative staff accounting for 38% of all individual users. This is followed by GPs (25%) and then nurses (22%).

The classification used in table 1 distinguishes between GPs and GP trainees but doesn't differentiate between different types of nurses. However, we could adapt this classification for a particular analysis by simply flagging the categories shown in table 2 in the accompanying Excel workbook. This contains the full mapping of the 149 categories to the 6 categories presented here, together with the original text and frequencies can be found in the accompanying Excel spreadsheet, It is notable that 20 categories of users account for more than 84% of all users as shown below.

Practice assigned category of user	Frequency	Col %
Locum	553	14.15
Receptionist	478	12.23
Other	397	10.16
Practice Nurse	372	9.52
District Nurse	242	6.19
Principal	213	5.45
Clerk	156	3.99
Health Visitor	133	3.40
Ex-user	127	3.25
GP Registrar	121	3.10
Midwife	91	2.33
Secretary	88	2.25
Practice Manager	75	1.92
Unknown User Type	73	1.87
Assistant	67	1.71
Deputising Doctor	65	1.66
Programmer	51	1.30

Table 2: Top 20 categories of staff as recorded by the practices

DISCUSSION

This short report demonstrates that the clinical or administrative role of the person entering data can be established in the QRESEARCH database. Since that user is linked to all data items in the database, the levels of analysis that could be undertaken (see next section) are large. In particular, analyses could look at consultation activity by clinician type, monitoring the effects of changes in primary care both overall (for example the introduction of the new GMS contract) and as a result of specific practice changes (such as practice enlargement).

FUTURE WORK

The classification of users enables us to undertake analyses of clinical activity [prescribing, consultations, diagnosis, clinical measurements] made by different clinicians [e.g. nurses, doctors, PAMS]. The analyses can be broken down by patient age, sex and calendar year. We can give an indication of the level of inter-practice variation.

We can also examine the proportion of consultations undertaken by nurses and doctors and how this varies between practices, over time and by location.

We would be able to estimate the number of staff in a practice at any one time and the skill mix although this would be based on the assumption that each type of staff records their activity on the database that might not be the case for PAMS.