DISCUSSION PAPER

Practice activity analysis: collaboration between general practitioners and a family practitioner committee

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SUMMARY. The Brent and Harrow family practitioner committee has supported a scheme to enable general practitioners to collect data relating to their practice activity. This paper reports on the operation of the scheme involving 76 general practitioners from 22 practices and the findings. Practice nurse activity was also included. The family practitioner committee undertook an analysis of the data and provided each participating general practitioner with a print-out of his or her consultation rates over a range of activity, enabling general practitioners to make comparisons both with their partners and with the averages for all the practices participating in the scheme. The essential aim is to provide structured information which enables general practitioners to look more objectively at their activity. The family practitioner committee gave an assurance that the figures would not be used to criticize individuals.

Introduction

Many general practitioners would like to know how their pattern of work compares with their colleagues. An editorial in the Journal in 1977 described how general practitioners could monitor their own performance in a simple quantitative fashion. This 'practice activity analysis' involved the collection of information about consultations, investigations, appointment systems and home visiting. A chapter on the use of practice activity analysis for performance review was also included in In pursuit of quality. It stated, 'practice activity analysis involves the measurement of common practice events for individuals and groups: the preparation of an individual feedback document where individual and group performance can be compared and free discussion of the results amongst the recipients'.

In 1986 Brent and Harrow family practitioner committee set up a working group with the local medical committee to explore the idea of giving doctors a measure of their practice workload by means of agreed data collection forms and analysis by the family practitioner committee. The district health authorities contributed to the working group and eight practices agreed to take part in a pilot scheme in October 1986. The family practitioner committee chief executive gave an assurance that the data collected would not be used as a tool for criticizing any individual doctor whose performance appeared to be significantly different from the 'norm'. The results of a pilot scheme showed that a larger sample was worth studying.

Aims of the scheme

The aims of the practice activity analysis scheme were:

- To assist general practitioners in applying for additional manpower by providing evidence of need to the medical practices committee.
- To support approval for general practitioners to undertake training.
- To assist in resolving disputes between partners by providing data on activity within the practice.
- To provide evidence to health authorities of services required by general practitioners.
- To show trends in work; for example highlighting areas of activity which require further input or which take up too many resources.
- To provide activity data for self-analysis and comparison with colleagues both individually and on an area-wide basis.

The scheme

All practices in Brent and Harrow were invited to participate in a scheme to run during October 1987. A seminar, arranged jointly by the family practitioner committee and the general practice postgraduate clinical tutor, was held at Northwick Park hospital on 16 September 1987 to explain how the scheme would work and 76 general practitioners and practice staff attended. Eventually 22 practices took part and an analysis was undertaken for 21 practices (one practice had a list size of less than 1000 and it was found that the activity analysis could not be used). In all 76 general practitioners, including assistants and trainees as well as principals took part, representing just over 20% of the total number of general practitioners in Brent and Harrow.

The scheme involved the completion of data collection forms to record various activities undertaken by general practitioners and practice nurses during the month.

General practitioner activity

For each day of the week the doctor recorded total hours of consultations and total number of consultations. The nature of the consultations were recorded under eight main headings:

- special clinic;
- obstetric (antenatal/postnatal, home confinement, general practitioner unit confinement);
- family planning;
- vaccinations and immunizations;
- referrals (urgent emergency referral to hospital including accident and emergency);
- cervical smear;
- investigations (X-ray, microbiology, haematology, biochemistry, other);
- others.

Contacts not included under number of consultations were recorded as: telephone advice, repeat scripts, visits (day, night, unsocial hours).
The forms were completed on a weekly basis, summarized onto monthly sheets, totalled, and the monthly totals were analysed using the family practitioner committee's microcomputer to provide the following information:

1. Mean time for consultation.
2. Consultations per 1000 patients on the list, broken down into: obstetric consultations per 1000 female patients aged 16–49 years, family planning per 1000 female patients aged 16–49 years, cervical smears per 1000 female patients aged 35–64 years, vaccinations/immunizations per 1000 patients.
3. Other contacts per 1000 patients: by telephone, repeat prescription requests, day visits (09.00 to 19.00 hours Monday to Friday), night visits (23.00 to 07.00 hours), unsocial hours visits (19.00 to 23.00 in the evenings and 07.00 to 09.00 in the mornings, Saturday 11.00 to 23.00 and all day Sundays).
4. Referrals to hospital per 1000 patients.
5. Use of investigations per 1000 patients.

Surgery consultations, referrals and investigations were also shown as a percentage of total consultations. Obstetric consultations were further broken down to show the percentage of antenatal and postnatal consultations compared with confinements. Urgent referrals were shown as a percentage of total referrals. Finally, the use of investigations was broken down to show the percentage use of X-ray, microbiology, haematology, biochemistry, other pathology and other investigation.

The analysis was based on each general practitioner's own list size as well as the mean list size for the practice. The monthly consultation rates calculated can be converted into an annual rate for comparison with other studies although this assumes that the month chosen for the survey is fairly typical. To obtain the annual consultation rate per patient, the figure should be divided by 1000, multiplied by 365 and divided by 31. The percentage breakdown of consultations can similarly be compared with other studies by expressing these in terms of rates per 1000 consultations (multiplying by 10).

The family practitioner committee computer provided each general practitioner with a comparison of his or her own analysis with the practice mean and with a mean figure for all the practices participating. A variation analysis was also calculated to show the highest and lowest scores and mean figures for all items for all practices (Table 1).

### Nurse activity

Because practice nurses undertake work on behalf of general practitioners their activity is extremely important in examining overall practice activity. Data collected by practice nurses was analysed to show:

1. Total hours worked: hours on administration and hours on education/training expressed as a percentage of hours worked.
2. Total number of patients seen expressed as patients per 1000 patients on the practice list.
3. The nature of the consultation was broken down into the headings on the data collection form: practical nursing, routine/travel immunizations, family planning (IUD, caps, pills, other), cervical smears, breast examination, health checks, blood specimens, clinic, counselling/advice. Each type of consultation was expressed as a percentage of the total number of consultations.

The mean for each activity for all nurses was calculated to enable nurses to compare their work with each other.

### Discussion

As has been observed in other analyses of practice workload, the most striking feature was the large variation in activity. Table 1. Practice activity analysis for 76 general practitioners for one month.

<table>
<thead>
<tr>
<th>Service</th>
<th>Lowest</th>
<th>Highest</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consultations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of consultations per GP</td>
<td>260</td>
<td>922</td>
<td>497</td>
</tr>
<tr>
<td>Mean consultation time per GP (min)</td>
<td>6.5</td>
<td>13.0</td>
<td>9.5</td>
</tr>
<tr>
<td>Total number of consultations per 1000 patients on list</td>
<td>85</td>
<td>356</td>
<td>243</td>
</tr>
<tr>
<td>Telephone advice (consultations) per 1000 patients on list</td>
<td>6</td>
<td>71</td>
<td>21</td>
</tr>
<tr>
<td><strong>Items of service</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetric consultations per 1000 female patients aged 16–49 on list</td>
<td>3</td>
<td>49</td>
<td>24</td>
</tr>
<tr>
<td>Family planning consultations per 1000 female patients aged 16–49 on list</td>
<td>0</td>
<td>62 (GP only)</td>
<td>31 (GP only)</td>
</tr>
<tr>
<td>Cervical smears per 1000 female patients aged 35–64 on list</td>
<td>0</td>
<td>53 (GP only)</td>
<td>15 (GP only)</td>
</tr>
<tr>
<td>Vaccinations and immunizations per 1000 patients on list</td>
<td>0</td>
<td>26 (GP only)</td>
<td>10 (GP only)</td>
</tr>
<tr>
<td><strong>Visits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day visits per 1000 patients on list</td>
<td>6</td>
<td>31</td>
<td>18</td>
</tr>
<tr>
<td>Night visits per 1000 patients on list</td>
<td>0</td>
<td>2.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Unsocial hours visits per 1000 patients on list</td>
<td>0</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td><strong>Referrals and investigations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total referrals per 1000 patients on list</td>
<td>10</td>
<td>31</td>
<td>17</td>
</tr>
<tr>
<td>Total number of investigations requested per 1000 patients on list</td>
<td>4</td>
<td>47</td>
<td>23</td>
</tr>
<tr>
<td>Repeat prescriptions per 1000 patients on list</td>
<td>2</td>
<td>158</td>
<td>72</td>
</tr>
</tbody>
</table>

Special circumstances in practices can explain some of the differences, for example in one practice the practice nurse deals exclusively with family planning work. One of the benefits in producing the analysis is to highlight variation and thus help...
individual general practitioners and practices to review how their work is organized and suggest ways in which they may wish to change. The data should not be used as a tool for external criticism. It is not the intention for a general practitioner to be told that a certain level of activity is good or bad. Rather it is for each general practitioner to compare his or her data and decide whether a different approach is needed. Following the issue of individual print-outs to general practitioners two seminars were held at which the results were discussed. It was evident that there was an enthusiasm to compare activity and many practices found that the information was of value and that it had led to alterations in their organization.

We do not pretend that the survey forms and method of analysis are perfect and we hope to refine the system or perhaps take a different direction. For example we could narrow the field of analysis to deal in more depth with specific areas of activity. A more sophisticated computer programme could enable a more detailed analysis of data with an examination of the effects of factors such as location of practices, whether a trainee general practitioner is in the practice, age of the general practitioner, size of practice and so on. It is intended at least in the short-term to continue the scheme in its present format and to encourage more general practitioners to participate. What we hope we have shown is the feasibility of family practitioner committees and general practitioners working together to provide a system of analysing practice activity and a method of practice audit. It is our view that looking at activity is not only of academic interest. It can be of real practical value to general practitioners both financially and in planning the way they provide services. This will surely benefit patients.

References

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