Patient Satisfaction with Primary Care
An analysis of the 2007-08 GP patient survey data

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The GP Patient Survey (GPPS)

General Information

The purpose of the survey
Another incentive?

- The survey set out to measure how satisfied NHS patients felt about access to their GP and experience of being offered a choice of hospital on referral.
- The questionnaire was mailed directly to patients who had been selected at random from practices' registered lists.
- Practices who participated were rewarded, based on the outcome of the survey.
- The Department of Health budgeted around £10 million for 2007-08 (the second year of the survey).

Some details
The size of the survey and the outcomes of interest

- A total of 1,999,523 valid responses was received from a total sample of 5 million people, a response rate of 41%.
- Five main outcomes asked patients about their experience and opinions of the service they received from their general practice:
  - Satisfaction with getting through to someone on the phone.
  - Ability to get an appointment on the same day or on the next 2 days the surgery was open.
  - Ability to get an appointment more than 2 full days in advance.
  - Ability to make an appointment with a particular doctor.
  - Satisfaction with the hours the surgery was open, over the last 6 months.
The GP Patient Survey (GPPS) Analysis Results Summary

Objectives
The data
The method

Objective of the analysis
Satisfaction was high (75-86%) but we really want to...

- Understand the factors that drive patient satisfaction and experience with access to primary care.
- Measure the variability in practice performance that can be explained by the characteristics of:
  - The patients.
  - The practices.
  - The Primary Care Trusts.

Three levels of data
Patient: Practice: Primary Care Trust

- The patient level data from the survey were combined with practice and PCT level data, from various other sources.
- Patient level:
  - Gender, age, number of appointments, parent, employment status, duration of journey from home to work, typical working hours, ability to take time away from work to visit GP, limiting longterm conditions, carer, ethnicity.
- Practice level:
  - Deprivation, rurality, list size, contract type, FTE ratio, QOF year 3 reported achievement, total hours, extended opening, emergency admissions, GP referrals, SMR, new registrations.
- PCT level:
  - Practice staff number, Walk in centre attendance*, Strategic Health Authority.
Multilevel multivariate regression was used to investigate relationships between each domain of satisfaction-experience and patient, practice and PCT characteristics.

We began with univariate analyses, which examined each predictor separately, and followed these up with a multivariate analysis that controlled for inter-relationships between predictors.

Since the outcome variables were binary (e.g. satisfied - not satisfied) in nature, we adopted a logistic regression approach.

Only three patient-level variables impacted all five domains of satisfaction and experience to a notable degree: age, employment status and ethnicity.

Satisfaction and positive experience...

- increased in level with increasing age.
- was lower amongst those working full-time than in any other group.
- was in most instances lower for ethnic minority groups, and in particularly amongst the Asian community.
All domains of satisfaction & experience were heavily influenced by **practice size** with the exception of satisfaction with practice surgery hours.

- Strategic Health Authority was the only predictor of note.
- Patients in the NE were the most satisfied and with better experiences.
- Variability was large for getting through on the phone and advance appointments but small for same or next day appointments.
Employment status was the most important patient-level predictor in the main analysis.
The sub-analysis gives us the opportunity to explore the importance of variables specific to working respondents, that were necessarily excluded from the main analysis:

- Travel time to work.
- Work pattern (Typical working hours).
- Can take time away from work to visit GP.

Predictors

- Patient-level:
  - The most notable predictor, in all domains, was the ability to take time off work to visit the GP.
  - The effect of age and ethnicity remained undiminished.
  - Travel time to work and work pattern had a sizeable effect on satisfaction with surgery hours.

- Practice-level:
  - Practice size’s strong effect was unchanged.
  - Emergency admission rates were notably related to satisfaction with telephone access and experience of advance appointments.

- PCT-level:
  - Strategic Health Authority again displayed a strong effect.
### Predictors of satisfaction and experience
**Moderate, strong and very strong**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Phone</th>
<th>Same, next day</th>
<th>Advance</th>
<th>Particular GP</th>
<th>Opening hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Employment</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+++</td>
</tr>
<tr>
<td>Time away</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Travel time</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td>Work hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice size</td>
<td>+++</td>
<td>++</td>
<td>+++</td>
<td>+</td>
<td>+++</td>
</tr>
<tr>
<td>Emerg. adm.</td>
<td>++</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHA</td>
<td>+++</td>
<td>+</td>
<td>+++</td>
<td>++</td>
<td>+</td>
</tr>
</tbody>
</table>

### Results overview
**Unadjusted % of satisfaction and positive experience**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Phone</th>
<th>Same, next day</th>
<th>Advance</th>
<th>Particular GP</th>
<th>Opening hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>86%</td>
<td>85%</td>
<td>75%</td>
<td>86%</td>
<td>80%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Br</td>
<td>87%</td>
<td>87%</td>
<td>77%</td>
<td>88%</td>
<td>83%</td>
</tr>
<tr>
<td>Asian</td>
<td>77%</td>
<td>80%</td>
<td>68%</td>
<td>77%</td>
<td>73%</td>
</tr>
<tr>
<td>Time away</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>89%</td>
<td>87%</td>
<td>77%</td>
<td>87%</td>
<td>83%</td>
</tr>
<tr>
<td>No</td>
<td>77%</td>
<td>74%</td>
<td>61%</td>
<td>76%</td>
<td>58%</td>
</tr>
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<td>Prac. size*</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>91%</td>
<td>88%</td>
<td>81%</td>
<td>89%</td>
<td>83%</td>
</tr>
<tr>
<td>Medium</td>
<td>88%</td>
<td>86%</td>
<td>76%</td>
<td>87%</td>
<td>82%</td>
</tr>
<tr>
<td>Large</td>
<td>84%</td>
<td>85%</td>
<td>72%</td>
<td>85%</td>
<td>82%</td>
</tr>
<tr>
<td>SHA</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NE</td>
<td>90%</td>
<td>87%</td>
<td>78%</td>
<td>88%</td>
<td>86%</td>
</tr>
<tr>
<td>London</td>
<td>84%</td>
<td>82%</td>
<td>75%</td>
<td>83%</td>
<td>78%</td>
</tr>
</tbody>
</table>
Patients reported high levels of satisfaction and positive experience, across all domains.

The patient-level variables that had the most notable impacts were age, ethnicity and employment status.

For those in employment, being able to take time off work to visit the GP had a very large effect, and effectively removed the disadvantage across all domains.

So did other factors that freed up time, such as working only part-time or having a short commute time.

Satisfaction and experience did vary by geographical area, as represented by Strategic Health Authority.

Practice size was the only practice-level factor of real note, with a substantial impact in all domains bar surgery hours.

Patients at small practices were more satisfied and reported easier access than those at larger practices, especially with respect to telephone access and obtaining appointments in advance.

In the univariate analyses, single-handed practices received the highest satisfaction and experience ratings on most domains.

Opening and extended hours did not appear to influence satisfaction and experience, even amongst patients working full-time.
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