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

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Outline

1. The GP Patient Survey (GPPS)
   - General Information

2. Analysis
   - Objectives
   - The data
   - The method

3. Results
   - Main analysis
   - Sub-analysis
   - Overview

4. Summary
   - Conclusions
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 £10million 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.
Aim 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 long-term 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.
Logistic multilevel regression on working respondents

Erm...why?

- 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.

Logistic multilevel regression on working respondents

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></th>
<th>Phone</th>
<th>Same, next day</th>
<th>Advance</th>
<th>Particular GP</th>
<th>Opening hours</th>
</tr>
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<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>
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<tr>
<td>Time away</td>
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<tr>
<td>Travel time</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td></td>
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<tr>
<td>Work hours</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Practice size</td>
<td>+++</td>
<td>++</td>
<td>+++</td>
<td>+++</td>
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<tr>
<td>Emerg. adm.</td>
<td>++</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHA</td>
<td>+++</td>
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<td>+++</td>
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Unadjusted % of satisfaction and positive experience

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<th>Opening hours</th>
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<td>Overall</td>
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<td>85%</td>
<td>75%</td>
<td>86%</td>
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<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
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<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>
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<tr>
<td>Time away</td>
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<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>
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<td>No</td>
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<td>74%</td>
<td>61%</td>
<td>76%</td>
<td>58%</td>
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<td>Prac. size*</td>
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<tr>
<td>Small</td>
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<td>88%</td>
<td>81%</td>
<td>89%</td>
<td>83%</td>
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<td>Medium</td>
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<td>76%</td>
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<td>82%</td>
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<td>85%</td>
<td>72%</td>
<td>85%</td>
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<td>78%</td>
<td>88%</td>
<td>86%</td>
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<tr>
<td>London</td>
<td>84%</td>
<td>82%</td>
<td>75%</td>
<td>83%</td>
<td>78%</td>
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To sum it up

- 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.
Thank you

Bigger is not always better!

Comments, suggestions:
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Kontopantelis | GP patient satisfaction