

How do practice-level patient survey scores relate to scores for individual doctors within practices?

Full reference and link to full text of paper

Roberts MJ, Campbell JL, Abel GA, Davey AF, Ekmore NL, Maramba I, Carter M, Elliot MN, Roland MO, Burt JA. Understanding high and low patient experience scores in primary care: analysis of patients' survey data for general practices and individual doctors. *BMJ* 2014; **349**:g6034 <https://www.bmj.com/content/349/bmj.g6034> (Open access)

Summary

In England, the General Practice Patient Survey (GPPS) is sent, annually, to a sample of patients registered at each general practice, to measure patients' experiences of their practice. The survey is carried out at practice-level only, without scores for individual doctors, making it difficult to know whether, for example, a low scoring practice has one or more GPs who would score more highly.

In this study, 25 English general practices were recruited, having been selected to give a range of scores on the GPPS. Patients who had recently consulted with a GP at the participating practices were sent a survey, based on the national GPPS survey which included questions on patient experience and patient socio-demographic characteristics.

The most interesting result was that, after adjustment for patient characteristics, practices with high GPPS GP communication scores tended to have only GPs with high individual communication scores. However, low scoring practices often had a mix of communication scores for individual doctors. This is shown well in Figure 1 of the paper. The authors suggest that the practice-level GPPS could be used to screen for practices where individual surveys may be required to identify lower scoring doctors.

Key researcher

Dr Gary Abel PhD is a statistician working in healthcare research. This is an essential role in most studies as clinical doctors, trial managers or healthcare scientists rarely have the kind of statistical expertise necessary to properly analyse the study data. Before retraining as a medical statistician, Gary Abel worked for the British Antarctic Survey and completed his PhD in space physics. At the time of the study he was working at the University of Cambridge Centre for Health Services Research. He moved to the University of Exeter in 2016 and is now a Senior Lecturer.

Picture- Figure 1 from the paper

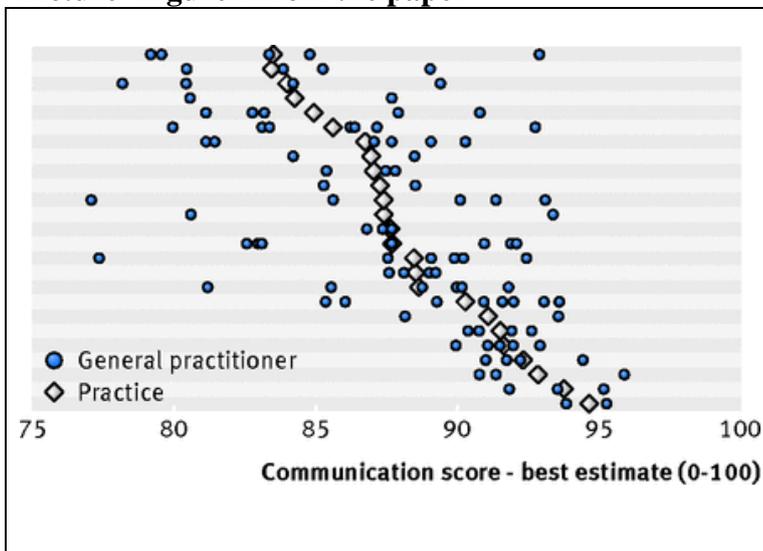


Fig 1 Mean communication score (best estimate) by practice and doctor. Practices (n=25) are sorted by their mean communication score. Horizontal shading serves only as visual separation of results for different practices. Reliability calculations using variance components showed that achieving acceptable reliability (>0.7) for general practitioners' adjusted mean communication scores with 27 patients' scores and good reliability (>0.8) with 46 patients' scores per doctor is feasible (see appendix). All but 10 of the 105 participating doctors had more than 46 scores; two received less than 27 scores (mean 71 scores per doctor). Data for these doctors was retained in the subsequent modelling, as use of best linear unbiased predictors to estimate doctors' mean scores has a "conservative" effect. Where sample sizes are smaller, estimated mean scores are drawn closer to practice mean

Thinking points

1. The GPPS was well designed and its design and testing has been well documented in a series of academic papers, including by many of the authors of this study. It has also been used in a large number of later research studies since the data is freely available. You can look at past survey questions and download the data for yourself here: <https://www.gp-patient.co.uk/>
2. GPs dislike the “naming and shaming” of individual GPs and so may prefer to have, in the public domain, practice-level measures only. However, individual performance measures allow GPs to work towards improvement.
3. The GPPS has undergone various changes over the last few years which make it harder to compare between years. Even the items which have stayed the same may be affected through “context effects”.