patient's sake, we should regard them as tools for ourselves, making our life easier and more secure.

The students are prone to feeling insecure because of their fewer medical skills, trying to get control by focusing on symptoms and thereby excluding the patients ICE. But at the same time students learn this clinical method faster, and they realise how much easier the work becomes when they practice this method. Just like surgery the method needs training, for example in the consultation lab, where the doctor playing the patient can feel what is working and not working. This is more convincing than studies on ICE, although I agree they are most welcomed.

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Author's response

I thank Dr Matthys for his thoughtful and constructive response.¹ It is comforting to know that other experienced colleagues face similar challenges in encouraging young GPs towards a more patient-centred consulting style. Heaven knows, we need to; I remember once being told by a candidate in an oral exam, 'Of course, I'd ICE the patient and all that rubbish'!

My personal experience in teaching trainees and MRCGP candidates about receipts has been that young doctors in particular appreciate and readily master this technique for getting beneath the surface of the patient's agenda early in the consultation. 'We know we ought to,' they often tell me, 'but we didn't know how.' I think providing them, early in their consulting lives, with a tool which helps the patient's thoughts to emerge naturally from the conversation is preferable to prolonging the habit of closed questioning, albeit in a two-tailed 'Do you think A or B?' format.

As to whether we need more ICE research, there's a whiff of irony about asking the question, 'Is it good to ask questions?' What

matters is not whether the doctor utters words which could be classified as enquiries about I, C, or E, but rather whether the patient's inner world is explored sensitively and relevantly, and whether the doctor knows what to do with the information gleaned. Research in this area, I suggest, should not be just an 'arm's length' affair of randomised trials or Likert scales. Rather, it needs to be participative person-centred research of the type championed by, for example, Peter Reason.²

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Incorrect inclusion of individual studies and methodological flaws in systematic review and meta-analysis

In the November 2013 issue of the *BJGP*, Huang *et al* reported their findings of a systematic review on the use of point-of-care C-reactive protein tests to reduce antibiotic use in respiratory infections in primary care.¹ This topic is highly relevant to GPs, as our specialty faces a major challenge in reducing excessive antibiotic prescribing.

To this end, it is important that scientific stringency is exercised when analysing the current evidence on an intervention that may be widely used if found to be effective. We are therefore more than concerned to discover that the present review has significant methodological flaws that impede the interpretation of the results. In their review, the authors state that all included papers were assessed by two independent researchers. Nevertheless, several errors were made.

First, the same data (regarding the same patients) from the Cals 2009 trial have been included three times. Next to the original trial comprising 431 patients, the authors have also included the antibiotic prescribing rates

from two additional publications describing the cost-effectiveness and the long-term follow-up of that same trial cohort.^{2,3} Of note, these two papers clearly describe that they present additional outcomes of that one original trial in all sections of the papers (including the title). They all include a reference to the same published protocol paper and the *BMJ* trial publication. This error has a significant impact on all tables and figures, as the erroneous triple inclusion resulted in an additional 609 (24.6%) participants.

Secondly, one may question the inclusion of the Gonzales study as this was conducted at an accident and emergency setting. This is not primary care, as the authors claim in title, abstract, and text.

Thirdly, when assessing effects on antibiotic prescribing during 28-day follow-up in Figure 2a (including the index consultation as assessed in the Cals trials), Huang *et al* have also included data from the Diederichsen and Kavanagh studies regarding antibiotic use after the index consultation only. These different effect measures should not be included in the same meta-analysis.

Finally, we were surprised to find that the main results are presented as a single meta-analysis aggregating data from all included studies regardless of study design. This is not consistent with current methodological practice.⁴

We think that this review needs to be fully redone using the correct studies and corresponding interpretation of analyses. A systematic review and meta-analysis should be 100% correct, as clinicians and researchers will rely on it, cite it, and use it for implementation in clinical practice.

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Authors' response

We considered Aabenhus and colleagues' comments about the shortcomings of our article. However we disagree with the main points in their letter. First, initially, we noticed that Cals *et al* may use the same dataset to publish duplicate studies. However, their results are different. In order not to miss any studies, we conducted the analyses both including them and excluding them. We found whether to include or exclude them would not affect the overall results. In this systematic review, we did not want to miss any studies that met the inclusion criteria.

Secondly, C-reactive protein (CRP) is a kind of biomarker for improving the assessment of infection. CRP is an inherent and natural inflammatory protein in patients irrespective of where a patient is, such as in primary care or emergency. The relationship of CRP to infection does not change. With the same condition, first contact may be flexible in primary care or accident and emergency; thus, we also included Gonzales' study. In addition, the sample size in Gonzales' study is very small and the exclusion of this study did not affect the results.

Thirdly, Aabenhus and colleagues are wrong. There is no Figure 2a in this study. We assume they meant Figure 3a, which studied antibiotic prescribing at any time during the 28-day follow-up. All the studies included in Figure 3a have same effect measure.

Finally, there were many publications of meta-analysis which combined the results from both randomised controlled trials and observational studies, such as cohort studies. In our study, we had already

conducted subgroup analyses according to the study design.

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Editor's note

Readers are invited to comment on this correspondence, in which some methodological questions about the selection of studies and patients for the meta-analysis are discussed.

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Patient experience and GP trainees

The contribution of GP trainees to individual practices and to national data on patient experience is often not emphasised, or perhaps undervalued. I would be interested in clarifying what proportion of consultations within these training practices in the study by Ashworth *et al*,¹ were conducted by its trainees. How much, if at all, does the patient experience at training practices reflect interactions with its GP trainees?

Indeed we have longer consultations, and financial or administrative targets are a lower priority. When I commenced GP training, most of us had a wonderful 15–20 minutes for each appointment. If my trainer sat in with me for joint surgeries, there was even more flexibility in the consultation. During these extended consultations, we had the time and opportunity to really understand our patients, explore their worries and experiences of the disease rather than simply treating biochemical markers of a disease.^{2–4} The patient was my only priority. As I come to the end of GP training and experience the reduced 10-minute appointments, increases in tick-box targets and administration, my consultations are changing and inevitably the patient experience will do so to.⁵

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Knowledge and attitudes of waterpipe tobacco smoking among GPs in England

Waterpipe tobacco smoking (WTS) is a growing public health concern. This exploratory study sought to assess the WTS knowledge and attitudes of healthcare professionals by distributing an anonymous, 12-item, cross-sectional survey to GPs in two areas; Brent: a socially-deprived, ethnically-diverse area of outer London known for its high prevalence of WTS¹ (response rate 49 out of 251 [19.5%]), and Lancashire: an area of the north west of England not typically known for its WTS popularity (response rate 113 out of 850 [13.3%]). Questions asked about WTS consultations, beliefs, and smoking prevalence among GPs.

Out of 154 GPs, 31.2% were from Brent. More Brent GPs had previously given advice to patients about WTS (36.7% versus 13.0%, $P<0.01$) and previously asked patients about WTS as part of a tobacco history (32.7% versus 12.0%, $P<0.05$) than Lancashire GPs. Very few GPs had read about WTS in the academic literature (8%) compared to news media (29%), 19% had given advice to patients about WTS, and only 16% were confident in giving accurate WTS information to patients. Over half of GPs correctly answered our WTS knowledge questions about the harms of WTS. Half made an attempt to estimate the equivalent number of cigarettes that are consumed during one WTS session, which is estimated to be around the 10 cigarette