test (i.e. how many of the negative testing patients excluded from the study were truly negative) depends on the prevalence of the condition being tested, the relationship being given by Bayes Theorem:[8]

For a negative result: Odds (Negative Predictive Value) = Odds (1–prevalence) x Likelihood ratio, where the Likelihood ratio is (Specificity/1–Sensitivity).

If the performance characteristics of the ELISA test had been given it would have been possible to estimate how many patients were excluded as false negatives. In general, none of the currently available tests for *H. pylori* have sufficient accuracy to significantly alter *a priori* knowledge based on the prevalence of *H. pylori* infection in this group. Given the great benefit and small risk of treatment, we believe that all symptomatic patients with proven histories of peptic ulceration should receive eradication therapy without prior screening for *H. pylori.*

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The use of a near patient serological test for *H. pylori*

Sir,

Like Rosengren and Polson (March *Journal,* p.177), I found around half the patients receiving intermittent or continuous repeat prescriptions for ulcer healing drugs in my practice had never been investigated by endoscopy or barium meal. In an evaluation of the use of a near patient serological test for *H. pylori,* we included patients with a typical ulcer history, and offered further investigation or treatment for those showing antibodies to *H. pylori.* Treatment was usually with a one-week course containing omeprazole, metronidazole, and either clarithromycin or amoxycillin.

A typical history required intermittent episodes in which the predominant symptom was well-localized epigastric pain which was relieved by food and antacids, and which woke the patient from sleep at least once during an exacerbation. Patients without these features, or those who also had nausea, vomiting or weight loss, were excluded.

Results of the serological test (Helisal, Cortecs Diagnostic Ltd) were positive for 16 out of 17 patients with a previous duodenal ulcer (DU), and 13 out of 15 with typical symptoms but no investigations.

Prescribing of antacids and ulcer healing drugs was recorded for an equal period before and after eradication therapy in those who had positive tests (for most patients this was 6 months) and the results are shown in Table 1.

Reductions in prescribing were matched by patient's perceptions of the effect of treatment. Questionnaires were posted to patients between 4 and 12 months after their treatment. From the replies, nine out of 13 patients with DU, and nine out of 11 with typical symptoms but no investigation, reported themselves either much better or cured.

This small study suggests that most patients with intermittent symptoms strongly suggestive of duodenal ulcer disease, who have antibodies to *H pylori,* appear to benefit from eradication of the organism, at least over 6 months, as much as patients with a proven DU in the past. As the alternative for them would be to wait for symptoms to recur off treatment and then defer ulcer healing treatment until an endoscopy was carried out, this approach was popular with our patients. This pragmatic approach should be investigated further in primary-care-based trials of *H. pylori* detection and treatment.

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Respiratory drug delivery devices

Sir,

I read with interest the article 'Optimising inhaled drug delivery in patients with asthma' (December *Journal,* p.683).[1] Would that life and 'lung deposition' were so straightforward, but alas, Jackson and Lipworth misunderstand the principles involved. They fail to appreciate that the most important aspect is to allow the patients to choose the device they prefer: something that respiratory-trained nurses have been doing for years.There is no device preferred by all patients, and it is misleading to quote deposition statistics and extrapolate these to clinical practice. The amount of drug deposited in the lung using the same device in different patients varies tremendously: up to ten-fold using sodium cromoglycate.[2] This variation far outweighs the estimated or meaned figures as quoted by Jackson and Lipworth, and is not dissimilar to the variation seen in the same patient using the same device from one inhalation to the next.

All inhalers have widely varying characteristics, so it is imperative that deposition,

Table 1. Prescriptions for up to 6 months before and after *H. pylori* eradication therapy for patients with a positive serological test (equivalent units: 500 ml antacid, 56 x 400 mg cimetidine, 28 x 20 mg omeprazole).

	Previous duodenal ulcer (*n*=17)			Typical symptoms only (*n*=15)		
	Before	After	Reduction	Before	After	Reduction
Antacids	3	0	3	3	1	2
H_2 receptor antagonists	35	15	20	31	11	20
Proton pump inhibitors	13	9	4	2	0	2
Total	51	24	27	38	12	24

clinical efficacy and systemic availability are all measured in the same study. It is inappropriate to infer clinical differences extrapolated from studies using different methodologies, sometimes with patients, and at other times, with healthy volunteers. These points have been aired and discussed in recent correspondence.[3,4] Any device which deposits more medication in the lung may or may not produce a greater clinical effect depending on the dose response curve of the medication in that patient at that time. However, it is unquestionable that such a device will increase the systemic bio-availability of the deposited medication.

Finally, I am intrigued by the authors' suggestion that fluticasone propionate is a more potent inhaled corticosteroid but that this does not translate into increased efficacy in doses greater than 1 mg day^{-1}. It is particularly when high doses of inhaled corticosteroids are required that chest physicians and respiratory paediatricians have extensively used fluticasone propionate and found it to be a clinical improvement compared with previously availably inhaled corticosteroids. Could I suggest that, although it is possible to fool some of the people some of the time, ultimately the proof of the pudding is in the eating — or even possible in the inhaling?

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MRCGP to MRNZGP

Sir,

Upon completion of my VTS last August in London, and having become a MRCGP, I decided to visit New Zealand to see what their general practice had to offer. Fresh with college ideas and input, I found it interesting to compare the New Zealand training schemes and college entry requirements with those in the UK.

New Zealand has no formal VTS like those in the UK that link the GP registrar year with hospital jobs. To work in general practice, you must have completed 2 years as a house-officer. This usually includes A&E, paediatrics and O&G posts. Vocational training (GPTP) run by the RNZCGP consists of a 10-month attachment in general practice as a GP registrar. This is often split between two or three practices, where you work under a supervisor who is a MRNZCGP. The training programme during these attachments is similar to that in the UK. Many GP registrars have also done SHO posts in paediatrics and O&G and may have taken diploma exams in these specialities.

Following completion of the GP registrar year, registrars sit the Primex exam.

This exam includes MCQ, slide quiz, critical appraisal paper, and three role-play consultations assessing communication and diagnostic skills. It is very similar to the MRCGP exam. General practitioners not enrolled on a GP registrar training scheme can also sit this Primex exam, either with no formal preparation or by attending a seminar programme. Completing a GPTP and passing the Primex exam gains you access to the college accreditation process to become a MRNZCGP. Accreditation involves a professional report and plan, CME programmnes, a consultation/patient satisfaction survey, video consultation review, and finally, a practice visit. This can be completed over 2 years if working full-time in general practice. Currently, the MRCGP gains you access to the 2-year accreditation process. Accreditation is over a longer period if working part-time or no GPTP has been completed.

Following accreditation, there is reaccreditation, a 5-year cycle that must be undertaken to retain the privileges of College membership.

The future is uncertain. Some would like to see college membership a requirement to practice, something that is also being discussed in the UK. Having seen first-hand the RCGP and RNZCGP approaches to training, I can see some benefits in both. Whether you approve or disapprove of either process, what is clear is that th two colleges have set themselves the same goals, i.e. to improve the standing of GPs and improve the quality of care offered to our patients in general practice.

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Corticosteroids in the management of croup

Sir,

A recent Editorial in the *BMJ* suggested that, if GPs treated mild to moderate croup with nebulized Budesonide, rather than steam, fewer children might need hospital admission.[1] The evidence is derived from hospital studies, but I was prompted to analyse my practice's emergency admissions with croup during the last 5 years.

Our population of 13 000 closely matches the national average for age distribution, with 6% under 5 years old. All the on-call duties have been covered by the seven partners. The computerized morbidity index records 11 children (nine boys and two girls) admitted a total of 14 times with a hospital discharge diagnosis of croup. All except one were aged less than 2 years, 9 months. The months of admission are shown in Table 1.

Table 1. Croup admissions by month.

	Month											
	J	F	M	A	M	J	J	A	S	O	N	D
Number of admissions	2	2		1	2	1			1	1	3	1

Ten out of 11 sets of notes were available for review. None of the children were treated with Budesonide prior to admission, although four had been given steam and four received bronchodilators. In hospital, four received nebulized Budesonide and rapid recovery was recorded in each case. The others received steam, bronchodilators or antibiotics. Nine of out ten had many other consultations or admissions with respiratory infections or asthma. The most striking feature is the overlap with asthma in the signs, treatment and subsequent diagnosis, even if the classical barking cough was present initially.

In summary, the small number admitted were mostly boys aged under 3 years, with a frequent history of respiratory problems. Important non-therapeutic factors influenced admission in three children: (1) Down's syndrome; (2) cleft palate and learning difficulties; and (3) family anxiety because of a brother's Sudden Infant Death. Excluding these three, up to 11 out of 14 admissions could perhaps have been prevented if better home treatment was available. Nebulized budesonide certainly