Reviewer’s report

Title: Referrals to a regional allergy clinic - an eleven year audit

Version: 1 Date: 23 August 2010

Reviewer: Audrey DunnGalvin

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The aim of this study was to audit eleven years of patients referred to the PAS. The most important aim was the spatial distributions to identify areas with high or low referral of true cases. This is a necessary and timely objective. In order to effectively plan and implement services, a clear estimate of the prevalence and distribution of the population in need is required.

The statistical analysis is well-thought out and results are clearly presented. There are however some limitations which are set out below.

Overall
As discussed in the manuscript, previous results are highly discordant from all of the cross sectional studies including population-based studies that have included testing and food challenge that normally give a lower rate than self-report. The discordance appears to be strong enough to favour the idea that GP databases are not capturing the diagnosis, possibly to a large extent.

A revision would likely need to better incorporate the inherent limitation throughout the paper, emphasizing the GP-recorded diagnosis (with contrast to prior studies when relevant). It is well-established among studies of coding that various specific diagnostic codes are under-utilized. More direct comparisons might strengthen the paper, at least by framing the potential under-recording. For example, if a large group of specialist-diagnosed individuals were identified, what percentage of them are included in the GP database? Would a GP tend to record the diagnosis if it were already known via a specialist? Would a GP record an associated diagnosis instead of peanut allergy, for example "food allergy” or another code for allergy?

Specific points

When discussing co-occurring allergy types, please make clear whether you are referring to ‘self-reported’ or ‘confirmed/diagnosed’ allergy. This would be interesting – are the public associating particular allergies in similar groups themselves?

Self-reported vs confirmed allergy should be presented clearly and discussed more thoroughly.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.