Non-attending patients in general practice

We agree with Frans Smits and Gerben ter Riet when, in their comment,[1] they suggest that it could be valuable to frame questions relating to non-attendance in terms of societal benefits and harms. However, we would like to take this opportunity to provide some additional clarification with regards to our analysis and presentation of results.[2]

Smits and ter Riet argue that we should have included information on medical diagnoses in our study[2] rather than provide this analysis in a future publication. Our decision to incorporate this information into a future publication was not taken lightly; the issues were raised during the review process, with one reviewer suggesting that the burden of long-term conditions is likely to be an important factor in the unmet need and behaviours of the patients within this population.[3] However, we judged that presenting these data satisfactorily in a single paper would have been overly complex, with other reviewers supporting this decision. In addition to a paper that will focus specifically on patients with multiple long-term conditions, we also plan to publish a future overarching paper focused on unmet need along with health-care utilisation across the health system.

Smits and ter Riet also suggested that our analysis might benefit from a multilevel approach that would involve the use of zero-inflated negative binomial models. Such an approach might be particularly useful, given that 54% of patients did not miss any appointments. We considered that the negative binomial models fitted the data reasonably well. An initial analysis attempted to use a mixed effects regression allowing for random practice effects, but even the simplest of models proved intractable in a dataset of this size, which was held with limited computational capacity (Safe Haven). To counter this limitation, we adjusted the analysis for available practice-level variables.

In our article,[2] we focused on describing the data, and the main effects of several patient and practice-level factors. To examine cross-factor interactions would have added another layer of complexity, which would have been very difficult to condense into a single paper. Such analyses would probably best be focused on interactions between a single factor (eg, sex) and factors that predict frequent non-attendance to address a coherent research question.

Finally, we agree that frequent attenders are indeed an interesting subgroup within themselves, which was why all our models were offset for the number of appointments made.[2] However, the claim that frequent attendance would prompt more changes to clinical work than non-attendance is unfounded. Although frequent attenders and frequent non-attenders are qualitatively different in terms of social and socioeconomic problems, they provide two equally important examples of unmet need.[2,4,5]

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2   Ellis DA, McQueenie R, McConnachie A, Wilson P, Williamson AE. Demographic and practice factors predicting repeated non-attendance in primary care: a national retrospective cohort analysis. Lancet Public Health 2017; 2: e551–59.

3   Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. Lancet 2012; 380: 37–43.

4   Smits FT, Brouwer HJ, ter Riet G, van Weert HC. Epidemiology of frequent attenders: a 3-year historic cohort study comparing attendance, morbidity and prescriptions of one-year and persistent frequent attenders. BMC Public Health 2009; 9: 36.

5   Williamson AE, Ellis DA, Wilson P, McQueenie R, McConnachie A. Understanding repeated non-attendance in health services: a pilot analysis of administrative data and full study protocol for a national retrospective cohort. BMJ Open 2017; 7: e014120.