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Geographical factors in access: investigating the impact of distance on the use of primary care extended hours, an administrative data study.

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Introduction

NHS national targets mandate extended opening hours of doctors' surgeries as a mechanism for increasing access to primary care, based on the assumption that unmet need is caused by a lack of appointments at the right time. Research has shown that other factors impact access and it may not simply be availability that limits an individual's ability to access health-care.

Aims and Objectives

To determine whether distance, familiarity and deprivation impact on the uptake of extended hours GP services that use a hub practice model.

Methods

We linked an appointments dataset to publicly available population datasets. With that linked dataset, we used negative binomial regression to model count data relating to uses of the extended hours service in one care commissioning group in the Greater Manchester city region. The dataset included 32,693 appointments across 4 hubs serving 37 practices.

Results

Familiarity and distance are important in predicting the number of uses of the extended hours service at a GP practice level. For a theoretical pair of practices collocated at the hub location, the model predicts a use rate of 101.2 for the non hub compared with 283.7 for the hub, a 180% uplift. For a pair of non-hub practices, one located the mean distance from the hub, the other located one mile further away, the model predicts 64.8 uses for the nearer practice, and 46.5 uses for the far practice, a 28% penalty.

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Conclusion

The results indicate geographical inequity in the extended hours service. There may be many patients with unmet need for whom the extension of hours via a hub model does not address barriers to access. Providers should consider whether or not this type of model actually works to facilitate access. This is particularly of importance in the context of closing health inequality gaps.