

The discriminatory power of Geodemographic classifications in targeting health promotion and disease prevention initiatives to tackle inequalities



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Introduction



The Public Health White Paper highlights the need for action to reduce health inequalities at a local scale. There is an emphasis on the role of Public Health departments in empowering local communities to make informed healthy lifestyle choices.

Little use has been made of geodemographic indicators to differentiate population conditions of unhealthy lifestyles that lead to poor health. Geodemographic classifications study population types and their behaviours as they vary by geographical area. They classify small areas, typically postcodes, by combining variables from the census of population and other socio-economic and lifestyle information.

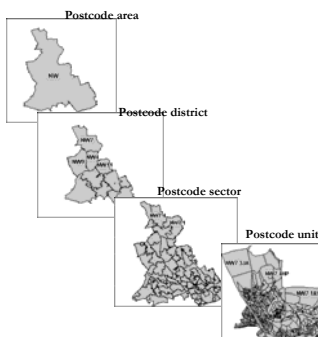
This research explores the use of geodemographics in Public Health initiatives at a local scale, within the boundary of one north London PCT (Camden PCT). Camden has a diverse population, with different population groups living in different neighbourhoods. Through the use of geodemographics it is possible to understand these differences and plan strategically for the appropriate interventions.

What are geodemographics?

Geodemographics investigate the combination of demographic data and information and how they are linked in space. They explore the individual and group characteristics to analyse social and economic data geographically.

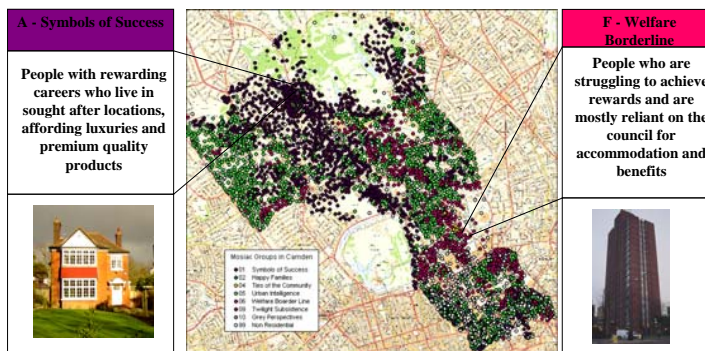
Geodemographics analyse people according to where they live, suggesting that by knowing where someone lives, it becomes possible to say something about the characteristics of that person. They are constructed on the premise that similar people live in similar types of neighbourhoods, go to similar places, do similar things and behave in a similar manner.

Example	Geographic unit	Number in UK - September 2004
N	Postcode area	124
N1	Postcode district	2934
N1 3	Postcode sector	9903
N1 3TR	Postcode unit	1.7 million



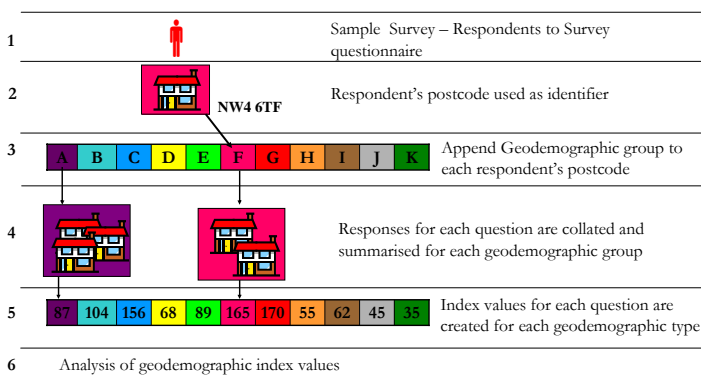
Postcode units are clustered together based on similarities in income, education, and household type, as well as attitudes and lifestyles preferences. A geodemographic type and group is available for every postcode in the United Kingdom. The Geodemographic system used in this research (Mosaic), has 61 different types of people in the UK, these types are associated to 11 higher level groups, of which 7 are represented in Camden.

Neighbourhood groups in Camden



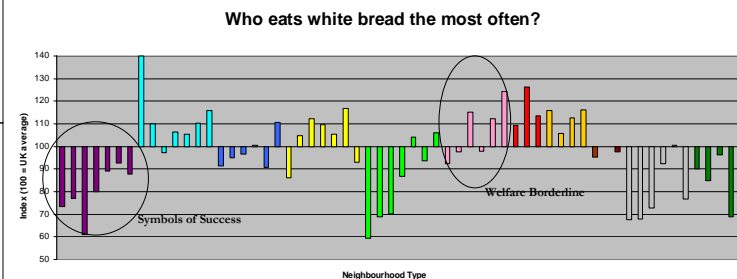
Linking geodemographics to survey data

Surveys of behaviour provide lifestyle information about different products, attitudes, technology, media and leisure habits. Surveys can be aggregated in such a way that lifestyle behaviour patterns can be measured for different geodemographic groups and types, enabling understanding of the different types of lifestyles that are being led by the different population groups within an area.



Understanding differences in diet

Survey data collected and collated by an organised market research survey, who apply sampling techniques to achieve representative samples of the population, were coded to geodemographic type. This enabled the study of different responses to dietary survey questions according to the 61 neighbourhood types.



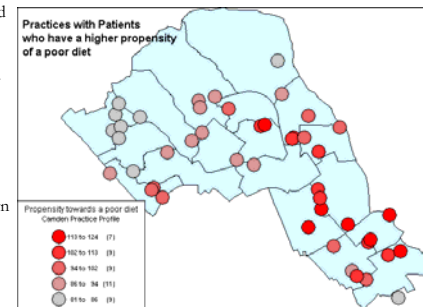
This chart shows the extent to which different neighbourhood types are heavy users of white bread for different UK neighbourhoods. Each colour represents the 11 different neighbourhood groups. The more affluent neighbourhood types and groups appear to eat less white bread (purple) than the less affluent neighbourhood types (pink and red).

General Practice Profiles of 'unhealthy' diet

This technique can be applied at a local level to understand the dietary habits of the local population. The expected rates of behaviour for different variables for each general practice were calculated, enabling the creation of a composite indicator of 'poor diet' to be created.

For each practice, the percentage of registered patients per Mosaic code was calculated. These percentages were then multiplied by the index value for each neighbourhood type. Finally these results were summed for each practice - giving an overall index value highlighting the likelihood of people having a poor diet.

The profile of unhealthy diet across the different general practices in Camden is shown in the corresponding figure. Practices in the less affluent southern part of the borough experience higher index values (ward boundaries are used as the background).



Why is this useful?

Through the application of geodemographic techniques it is possible to understand different lifestyle behaviours of neighbourhoods. It enables the investigation of neighbourhood composition using geodemographic typology and other datasets to understand differential behaviours and lifestyles of local neighbourhood populations, and adds social context to the understanding of health inequalities of neighbourhoods.

The derived profiles can be attached to other public health initiatives databases in order to more efficiently segment the population of the PCT and target the groups at risk.