



# **Using OAC as a tool to help inform health insight planning in Yorkshire and the Humber**

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# YHPHO **How do they add value?**

- Population health profiling:
  - Understanding the characteristics of small geographical areas.
  - Mapping and visualisation.
- Targeting health interventions by identifying areas with excess expected prevalence/incidence etc.
- Measurement of health inequalities by:
  - Explaining variation in health determinants, outcomes or services.
  - Providing a more granular measure of health inequality.
- Social marketing and communications
- Support data linkage, and non-disclosable data sharing.
- As a base for generating additional insight - on top of the off-the-shelf descriptions.

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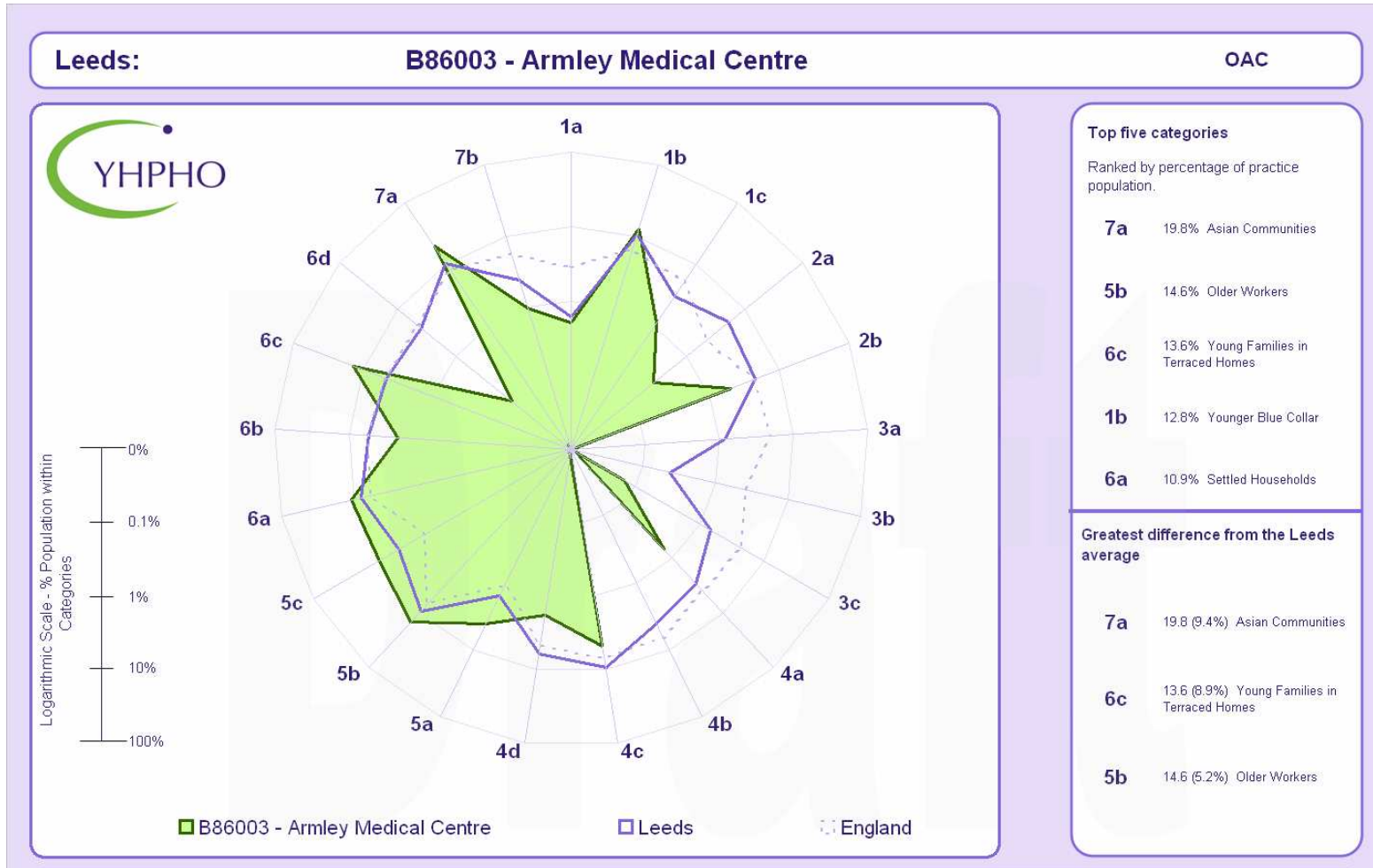


## What geodemographics can not tell us.

- Analysis of the profiles is usually based on probabilities, rather than hard data.
- Not really intended to be used as a trend monitoring tool.
- Geodemographics in themselves do not provide the answer. They are simply one of a range of tools and approaches that can be used to generate insight and health intelligence to support social marketing decisions.



# General Practice Profiles



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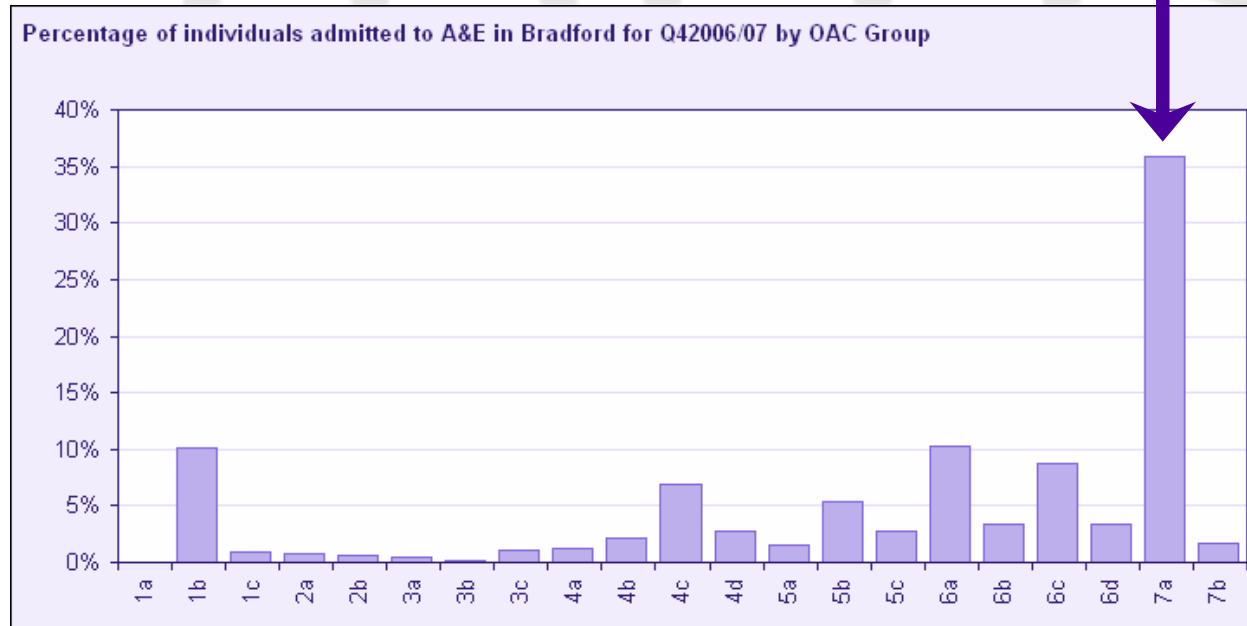


## **SHA Social Marketing Programme**

- **West Yorkshire Unplanned Care Project:**
  - The goal being to help make the most efficient use of available A&E services and resources within West Yorkshire.
  - To be achieved by investigating available data from A&E departments in West Yorkshire both on its own and along with a variety of geo-demographic segmentation tools, in order to produce information that can then be used through social marketing to help optimise patient access to unplanned care.



# Example of Profiling A&E admissions for the Bradford District:

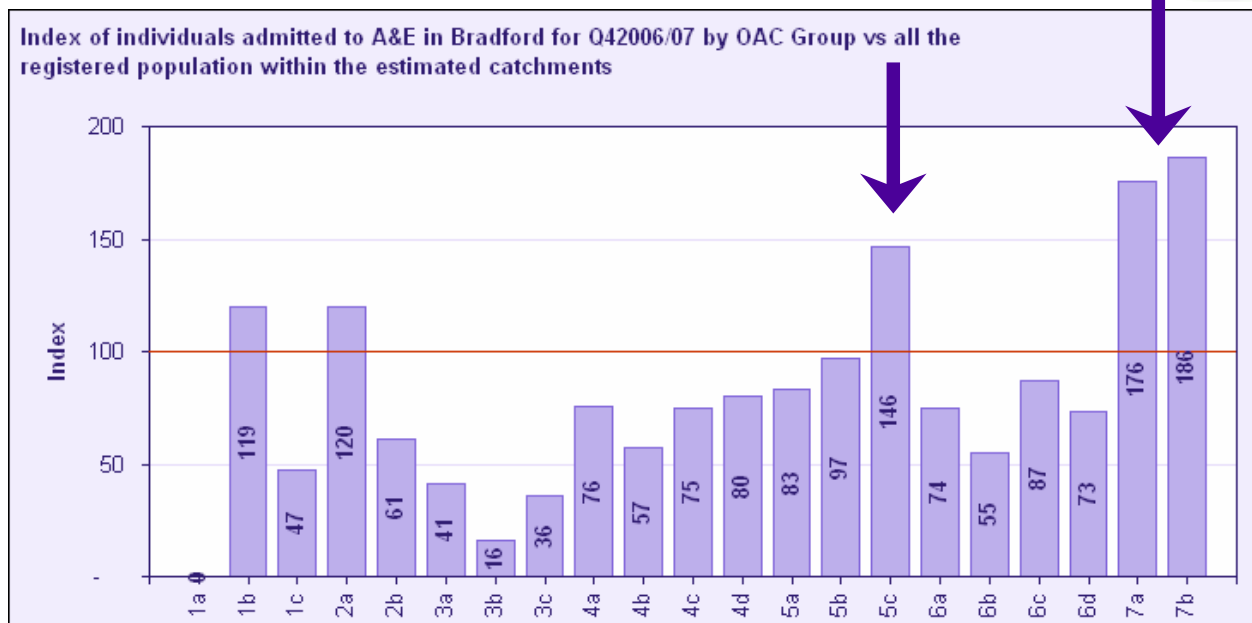


<b>1 Blue Collar Communities</b>	<b>1a</b>	Terraced Blue Collar	<b>4 Prospering Suburbs</b>	<b>4a</b>	Prospering Younger Families	<b>6 Typical Traits</b>	<b>6a</b>	Settled Households
	<b>1b</b>	Younger Blue Collar		<b>4b</b>	Prospering Older Families		<b>6b</b>	Least Divergent
<b>1c</b>	Older Blue Collar	<b>4c</b>		Prospering Semis	<b>6c</b>		Young Families in Terraced Homes	
<b>2 City Living</b>	<b>2a</b>	Transient Communities		<b>4d</b>	Thriving Suburbs		<b>6d</b>	Aspiring Households
	<b>2b</b>	Settled in the City	<b>5 Constrained by Circumstances</b>	<b>5a</b>	Senior Communities	<b>7 Multicultural</b>	<b>7a</b>	Asian Communities
<b>3 Countryside</b>	<b>3a</b>	Village Life		<b>5b</b>	Older Workers		<b>7b</b>	Afro-Caribbean Communities
	<b>3b</b>	Agricultural		<b>5c</b>	Public Housing			
	<b>3c</b>	Accessible Countryside						

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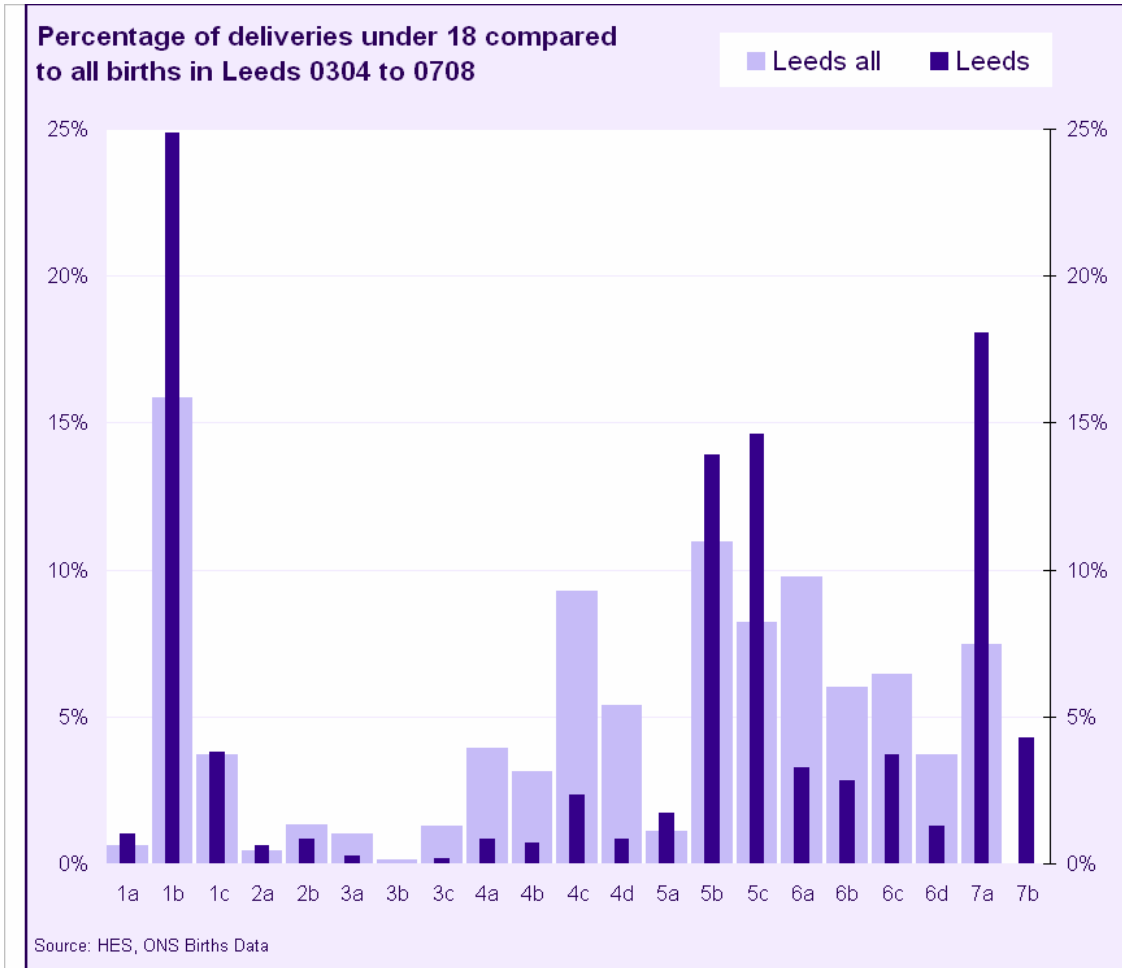


<b>1 Blue Collar Communities</b>	<b>1a</b>	Terraced Blue Collar	<b>4 Prospering Suburbs</b>	<b>4a</b>	Prospering Younger Families	<b>6 Typical Traits</b>	<b>6a</b>	Settled Households
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# Leeds – Under 18 Deliveries

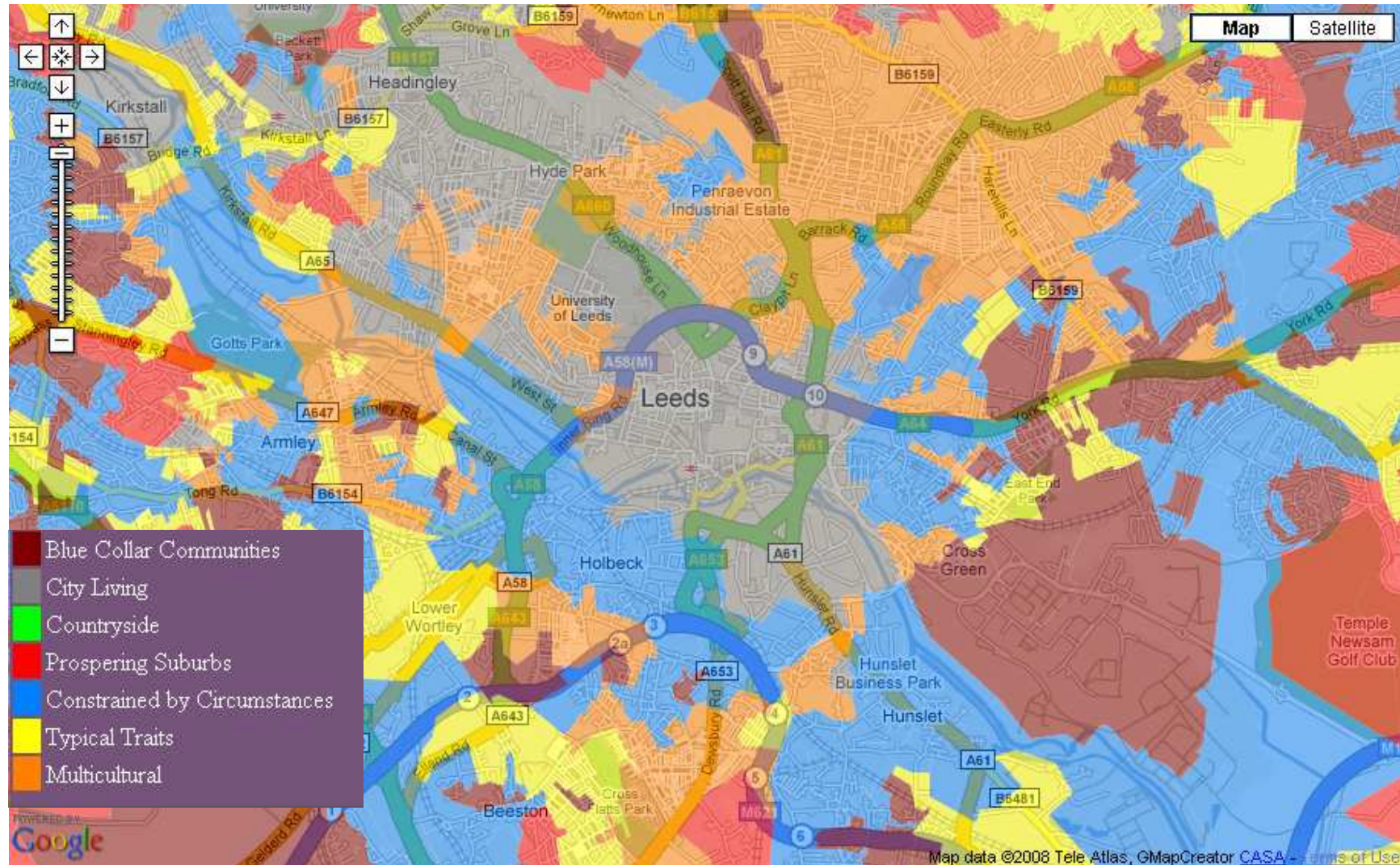


OAC	
Category	Group
1 Blue Collar Communities	1a Terraced Blue Collar
	1b Younger Blue Collar
	1c Older Blue Collar
2 City Living	2a Transient Communities
	2b Settled in the City
3 Countryside	3a Village Life
	3b Agricultural
	3c Accessible Countryside
4 Prospering Suburbs	4a Prospering Younger Families
	4b Prospering Older Families
	4c Prospering Semis
	4d Thriving Suburbs
5 Constrained by Circumstances	5a Senior Communities
	5b Older Workers
	5c Public Housing
6 Typical Traits	6a Settled Households
	6b Least Divergent
	6c Young Families in Terraced Homes
	6d Aspiring Households
7 Multicultural	7a Asian Communities
	7b Afro-Caribbean Communities

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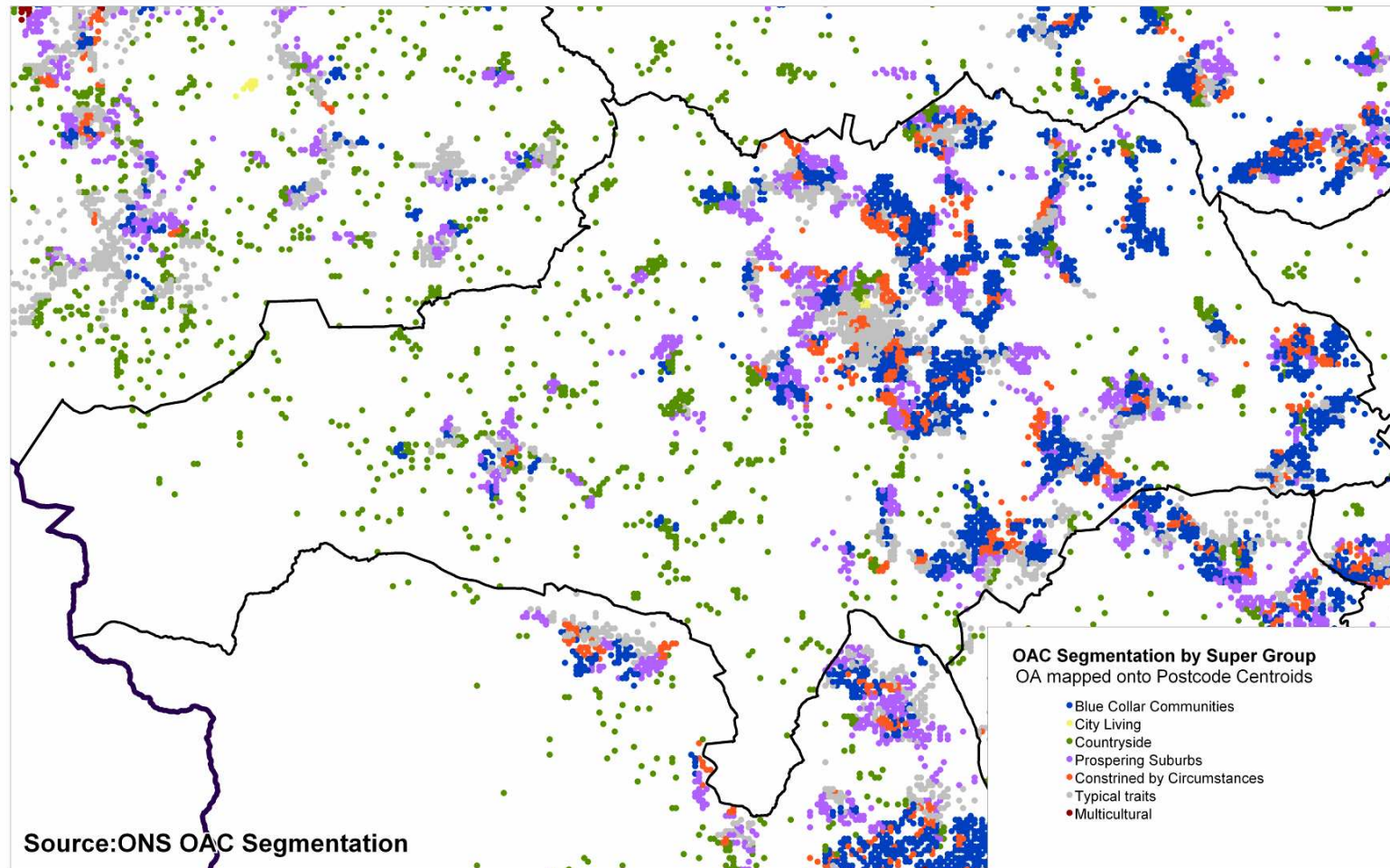
# Map of Leeds Using OAC Supergroups



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# Map of Barnsley Using OAC Supergroups

Map of OAC SuperGroups in Barnsley:  
Output Area mapped onto Postcode Centroids to Determine Population Centres



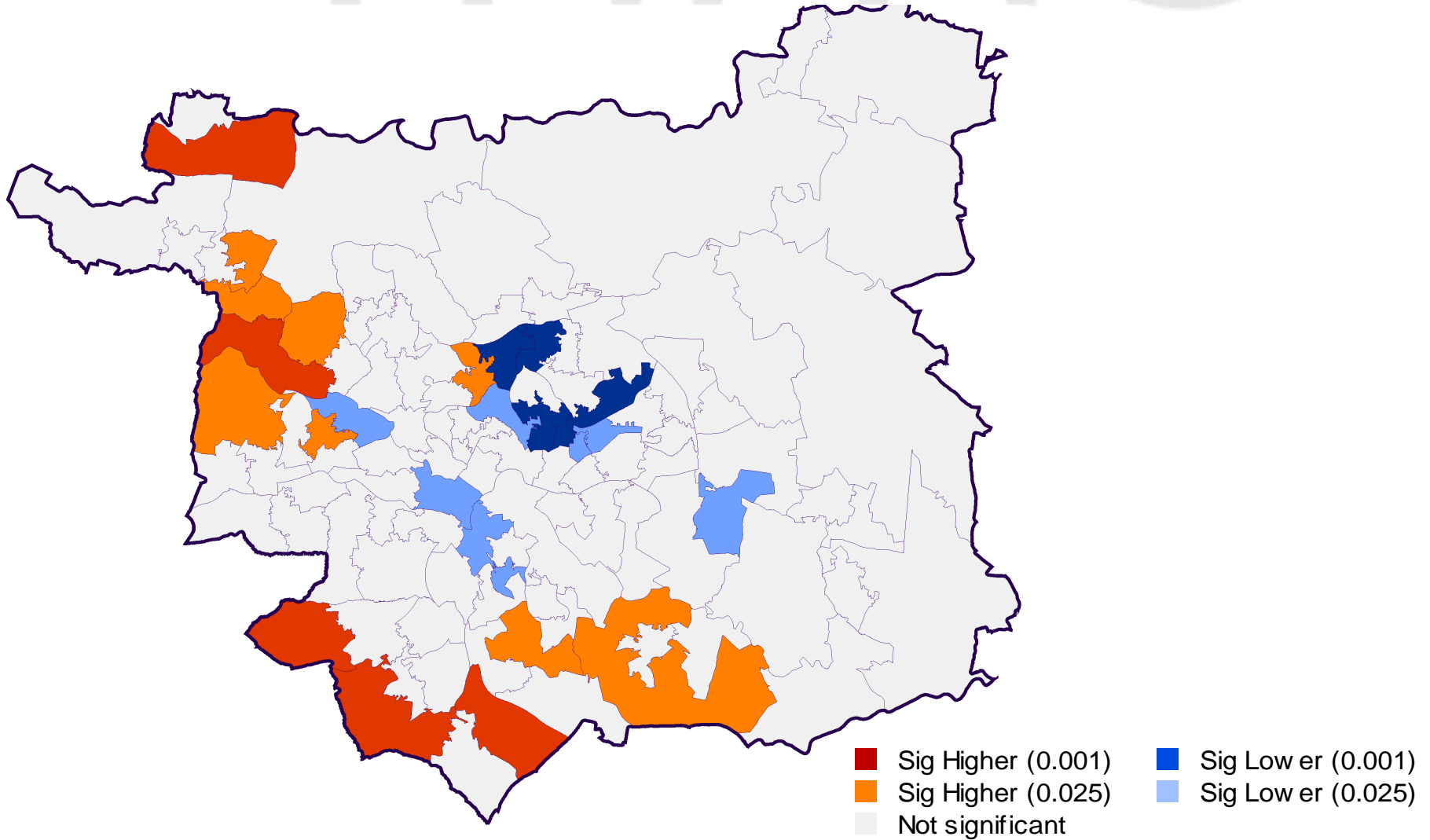


## Other Investigation

- Currently investigating methods to both quantitatively and qualitatively benchmark the various geodemographic segmentation tools available.
  - Discriminatory power using the Gini Coefficient (work undertaken by Ade Ojo from the University of Sheffield).
  - Predictive power using Hospital Episode Statistics (HES) data



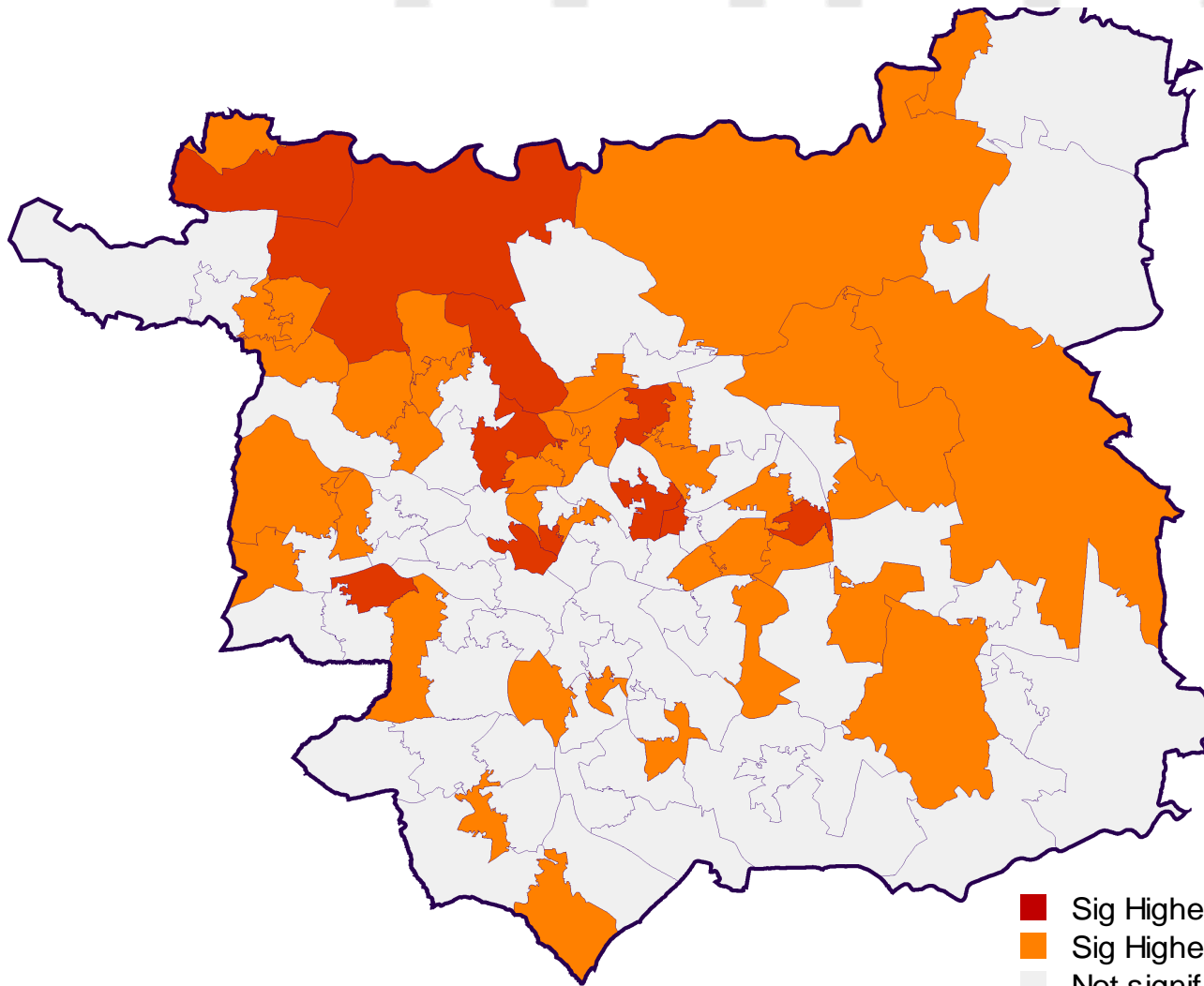
# Leeds - Diabetes



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# Leeds – Lung Cancer

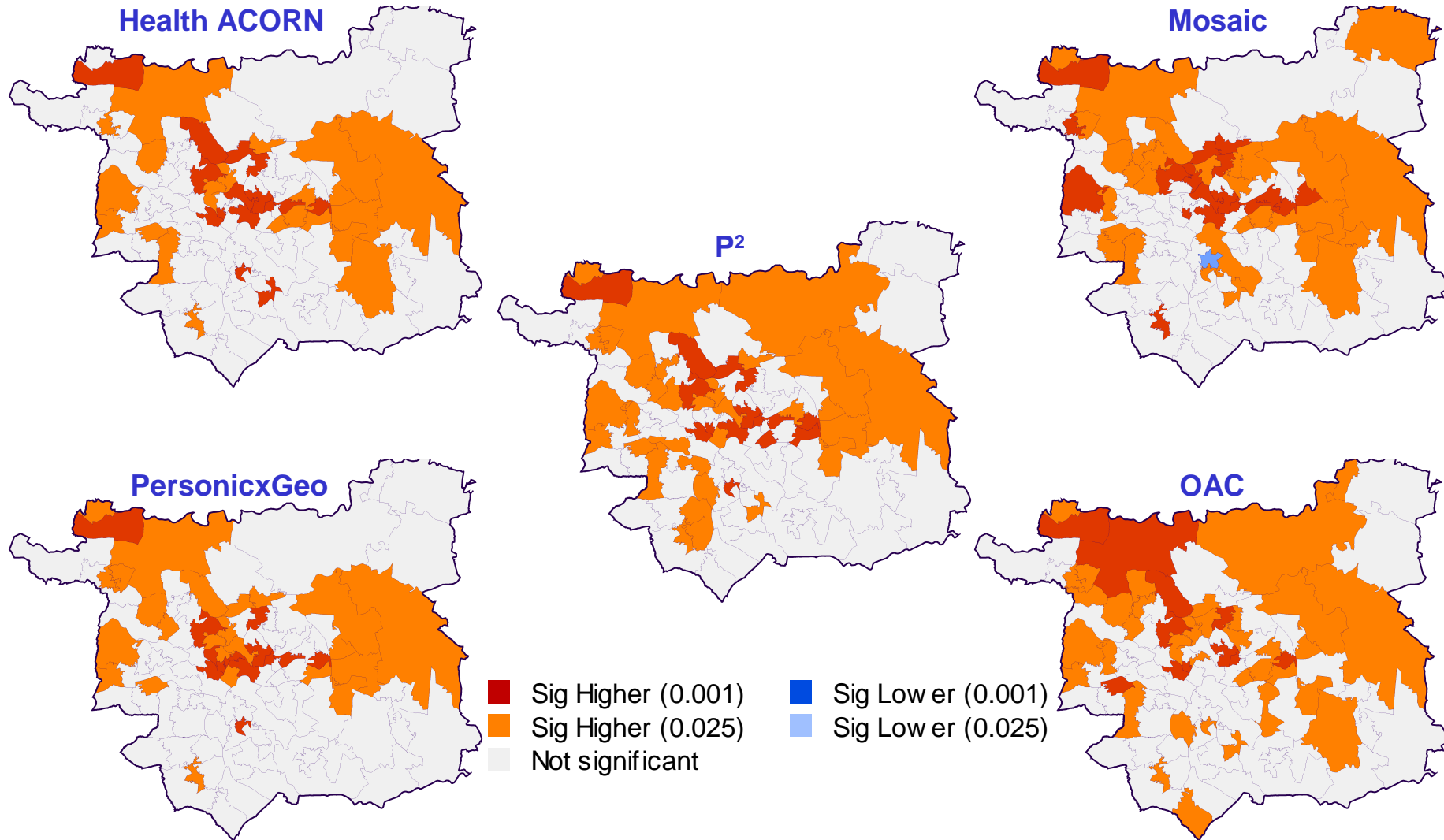


- Sig Higher (0.001)
- Sig Higher (0.025)
- Not significant
- Sig Lower (0.001)
- Sig Lower (0.025)

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# Admissions 2002 to 2006 for Lung Cancer (ICD10 C33 – C34) – Leeds MSOAs



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# Advantage & Disadvantages of OAC

## Disadvantage

- Currently does not have additional data attached to it (such as shopping habits etc.) that can prove useful to social marketers.

## Advantage

- It's freely available
- It's method of construction is easily available



# A regional insight model?

- Purchase and maintain a range of geodemographic databases – use most appropriate system as required based on agreed quantitative and qualitative comparative criteria
- Gather and build insight based around regional and locally collected data
- Ensure geodemographic coding of all health surveys undertaken locally
- Feed back and support local projects by supplementing local analysis and projects with other linked insight
- Links with regionally led social marketing programmes



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