UK Public Health Association

Healthy Housing, Healthy People?

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UKPHA Special Interest Groups

The UK Public Health Association's Special Interest Groups provide an opportunity for UKPHA members to come together to influence policy, advocate and create awareness around a particular issue or area of interest. They are excellent cross-sectoral networking groups and are ideally placed to lead the collaborative and multidisciplinary working essential in taking the new public health agenda forward

UKPHA Special Interest Groups

- Health & Housing
- Alcohol & Violence
- Food
- Child Public Health
- Health & Sustainable Environments
- Pharmacy & Public Health
- Public Mental Health

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Health Inequalities

Sir Donald Acheson's

Definition of Public Health (1988)

"The science and art of preventing disease, prolonging life and promoting health *through the organised efforts of society*."

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Fair Society Healthy Lives

'The Strategic Review of Health Inequalities in England – post 2010'

Sir Michael Marmot – February 2010

"Rise up with me against the organisation of misery"

Pablo Neruda

- **Poor housing costs the NHS more than £2bn a year in treating people suffering from a wide range of illnesses linked directly to living in cold, damp and often dangerous homes,**

- **the cost to the public purse of police responses to crimes associated with substandard housing is estimated as being around £1.8bn a year.**

- **Overcrowded homes severely damage children's chances of doing well at school - fuelling a cycle of poverty in poorer communities**

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- **The Pro Housing Alliance** launched on September 9th 2011 recommends that government should develop a strategy based on the calculation of health costs and other costs arising from housing policy adopting a business model approach

- The PHA states that *" it is reasonable to believe that the annual cost of poor housing could be £5bn, £7bn or more"*

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Data mapping and overlay between PCTs and local authorities

Health Data – Data Source Table

The table below shows the health data available to PCTs

Measure	Geographical Level	Data Indentified	Frequency	Availability
numbers of patients admitted to hospital	National / SHA Area / PCT Area / LA Area / Practice Level / Part Post code	Age & Age Band, Gender, Ethnicity	Updated Monthly	Every PCT should be able to retrieve data about their own PCT
Prevalence of diseases in the community	National / SHA Area / PCT Area / LA Area / Practice Level	Number & Percentage of condition, males, females	Yearly (Pooled)	Yes (Publicly Available)
Death Rates	National / SHA Area / PCT Area / LA Area	Males, Females & People	Yearly	Yes (Publicly Available)
	National / SHA Area / PCT Area / LA Area / Practice Level / Post code	Age & Gender	Monthly	Only available by PCTs
Clinical Indicator-Blood pressure, COPD rates	National / SHA Area / PCT Area / LA Area / Practice Level	Number & Percentage of condition	Yearly (Pooled)	Yes (Publicly Available)

Housing Data – Local Authority

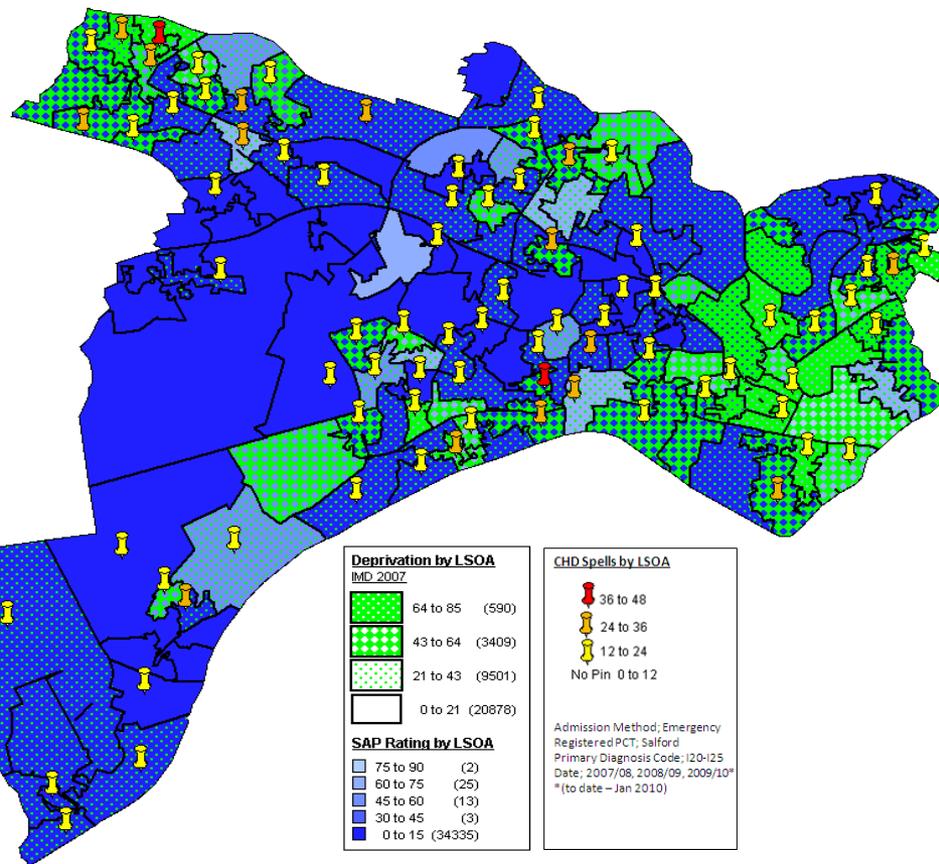| Measure	Data Source	Geographical Level	Data Indentified	Frequency	Availability
Domestic Housing Attributes	**Private Sector Stock Condition Survey**	**Authority / Ward / SOA / Street / Postcode / Dwelling**	**Domestic housing attributes e.g.:** **Year built** **Built form** **Type & level of insulation** **Central heating system**	**3-5 yearly, some will be updated annually depending on LA**	**Every LA should hold data about their own LA**
Standard Assessment Procedure Rating	**Private Sector Stock Condition Survey**	**Authority / Ward /SOA / Street / Postcode / Dwelling**	**Standard Assessment Procedure (SAP) Rating**	**Updated regularly by local officer**	**Every LA should hold data about their own LA**
Fuel Poverty	**Centre for Sustainable Energy – Fuel Poverty Indicator**	**LSOA / Ward**	**Number and percentage of population in fuel poverty**	**Based on the 2003 English House Condition Survey (EHCS) and 2001 Census**	**Yes (Publicly Available)**
Compound Measures	**Local Energy Efficiency Database, e.g. UNO**	**Authority / Ward / SOA / Street / Postcode / Dwelling**	**E.g. annual domestic heating running costs per year**	**Updated regularly by local officer**	**Every LA should hold data about their own LA**

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Contextual Data – Other Sources

The table below shows other contextual data that can be used

Measure	Dataset	Data Source	Lowest Level	Data Indentified	Frequency	Availability
Income	**Pay check**	**CACI**	**Postcode**	**Household Income: Mean income Median income Mode income**	**Annual**	**License**
Income	**Labour Market Statistics online**	**ONS**	**City**	**Number of jobs per thousand Mean income Median income Annual % change**	**Annual**	**Yes (publicly available)**
Income	**Individual Benefits**	**Department of Work and Pensions (DWP)**	**LSOA**	**Attendance Allowance Disability Living Allowance Incapacity Benefit/Sever Disablement Allowance Income Support Job Seekers Allowance Pension Credit State Pension**	**Quarterly**	**Yes (publicly available)**
Deprivation	**Index of Multiple Deprivation**	**Communities and Local Government (CLG)**	**LSOA**	**Indication of levels of Deprivation by area/ward**	**Annual**	**Publicly Available**
Geo Demographic	**Mosaic**	**Experian**	**Post Code**	**Geo Demographic segmentation**	**Licence**	**Licence**
Geo Demographic	**Acorn**	**CACI**	**Post Code**	**Geo Demographic segmentation**	**Licence**	**Licence**

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Using the Data – Stepping through the Process

Does energy inefficiency correlate with CHD and areas of deprivation

Deprivation by LSOA
IMD 2007

	64 to 85	(590)
	43 to 64	(3409)
	21 to 43	(9501)
	0 to 21	(20878)

SAP Rating by LSOA

	75 to 90	(2)
	60 to 75	(25)
	45 to 60	(13)
	30 to 45	(3)
	0 to 15	(34335)

CHD Spells by LSOA

- 36 to 48
- 24 to 36
- 12 to 24
- No Pin 0 to 12

Admission Method; Emergency
Registered PCT; Salford
Primary Diagnosis Code; I20-I25
Date; 2007/08, 2008/09, 2009/10*
*(to date – Jan 2010)

Summary

Data Sources Used:
- Emergency Admissions for CHD from SUS
- SAP rating from UNO
- Deprivation data from ONS

The darker blue areas on the map highlight housing that has a low SAP rating and therefore are energy inefficient.

The greener areas highlight areas of higher deprivation.

The Red markers indicate higher numbers of emergency admissions due to CHD.

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Geo-Demographic Segmentation

Higher Than Expected Hypertension Rate
By Mosaic Group (2007)

- 1.18 to 8.1 (33422)
- 1.02 to 1.18 (16666)
- 0.74 to 1.02 (30894)
- 0   to 0.74 (28392)

Heating Running Costs (£)
- £651 − £867
- £434 − £651
- £217 − £434
- No Pin £0 - £217
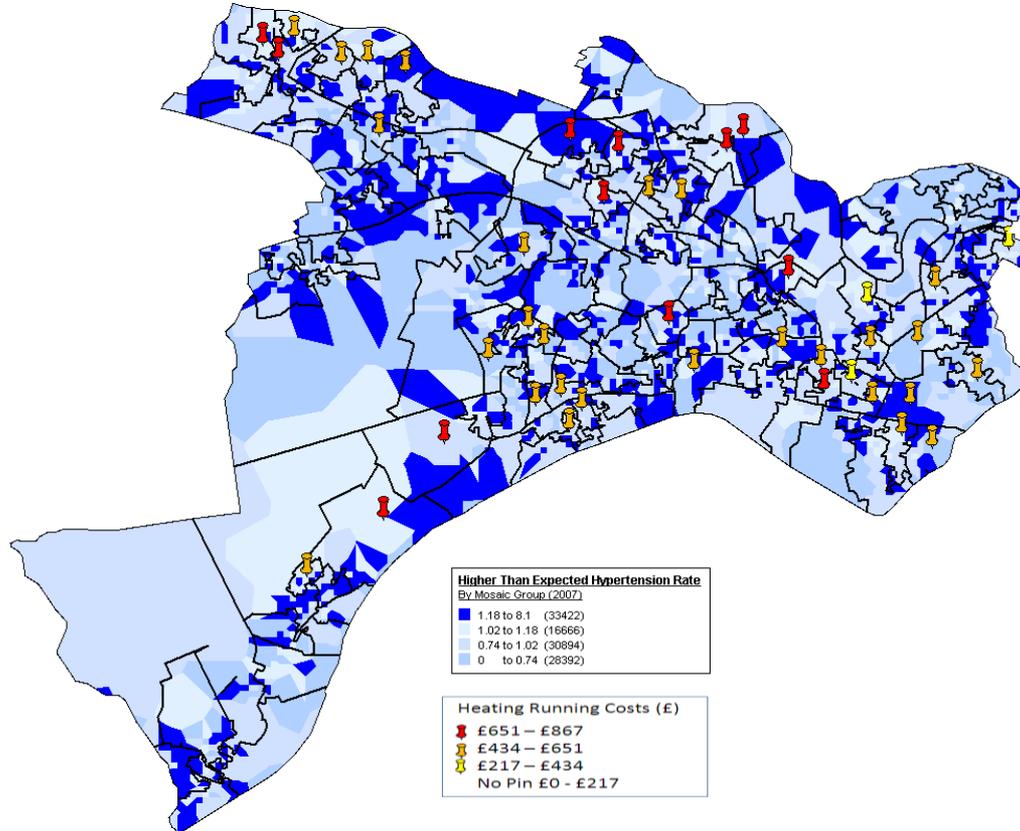
Summary

Data Sources Used:
- SUS Admitted Patient Care (Hypertension Spells)
- Mosaic Population Segmentation
- ONS Mid Year 2008 Population Estimates
- Heating running costs – Salford LA

Calculating who to target:
- SUS – all Hypertension spells between 2008 and 2009
- Mosaic groups attributed to each spell based on the patient's postcode
- Dividing the admissions by segment populations enables an expected rate of admission to be calculated for each Mosaic segment
- The average rate for the population is 1
- Using the average rate, comparisons were made with the actual admission rates for each Mosaic segment. For example, if a segment's rate was 3 then there were 3 times as many spells than expected. This is the higher than expected rate of Hypertension.

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GP IT Referral Systems

Health and social care workers offer

- Access to vulnerable patients who may remain unidentified
- Face to face 70% population in 1 year, 90% in 5 years- vulnerable seen at least annually
- Access to those lacking literacy skills or confidence to access service themselves
- Trust of the patients
- Putting warmth on the health agenda
- Negotiation skills
- Reassurance
- Non judgmental attitude

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GP IT Referral Systems

IT Modification Gives
A Simple Way For GPs
To Make Fuel Poverty
Referrals

Reactive or Pro-Active.
Referrals can be reactive, when a
patient presents in the surgery
or pro-active through searching
risk factors.

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Example of a fuel poverty flag in the Vision system

- The provision of free insulation and heating improvements to help people keep warm in their houses falls into the group of public health interventions for which there is certainty about the direction of benefit.

- It is known that the intervention will produce a positive benefit rather than harm.

- The benefit is from fuel saving for recipients or increased comfort or a combination of both.

- The magnitude and exact timing of these benefits is uncertain but these types of situation when the likelihood of harm can be ignored and direction of benefit is known, further evaluation need only look at the magnitude and timing of benefits to more precisely find out if the intervention is worth the cost

The Report concludes that:

Warm housing interventions in targeted populations are almost certainly cost effective and that they can be considered a good use of public resources.

The benefits gained in the UK are likely to be mainly from comfort taking and a consequent improvement in mental wellbeing.

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- There is a worrying lack of understanding of the true health costs of poor housing and lifestyle choices, as well as the need for improved empirical evidence of the health benefits related to housing.

- There is also a significant lack of knowledge of the causal relationships of excess winter mortality (and associated morbidity) which significantly affects especially the elderly and younger population

- We recommend further research, built onto the current department of Energy and Climate Change study into monetarising the health benefits of it's energy efficiency policies.

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The organised efforts of Society?

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