Wakefield District Health Equity Audit 2010

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See also Wakefield District HEA 2009
Main Messages presentation

• Full report available as 30Mb powerpoint presentation
• This presentation attempts to identify some themes from this analysis and to provoke thought and discussion
Indicator Categories

- Context
- Wider Determinants
- Vulnerable Groups
- Lifestyle and Long Term Conditions
- Access to Services
- Prescribing
- Access to Acute Services
- Overall Outcomes

The report looks at the wider determinants through to the delivery of healthcare and its outcomes.
Context

• Deprivation
• Roads and GP Practice
• Population Density
• Ethnicity
• Population Age Structure

A range of contextual information allows us to answer questions such as:

Is this pattern due to:
Deprivation
Urbanisation
Ethnicity
Age mix
Environmental factors
Distance to services
The countryside is green and sparsely populated. Estates such as Airedale are clearly visible. The priority neighbourhoods are marked.
Most ethnic minorities are located in Wakefield city.
The most deprived population has a younger age profile.

The most affluent population has an older age profile.
90% of the most affluent own their homes.

65% of the most deprived don’t.

Relative slope index -105% is steep.
GCSE Attainment,
% achieving 5 A*- C grades
(including Maths and English)
Wakefield District
Ward values represented at Postcode level (2009)

Most Deprived Quintile (Fifth)
Least Deprived Quintile (Fifth)

The most affluent achieve twice as many grades as the most deprived.

But there seem to be a few exceptions.

Data quality or real issues?

Relative Slope Index - 100%
The most affluent have 1.5x the income of the most deprived.

What is happening in South Kirkby?
Relative SI: -45%

Average Household Income, Wakefield District
LSOA values represented at Postcode level (2008)

Benchmarks:
PCT Average = £29,998

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Four times as many on benefits in the most deprived communities compared with the most affluent.

A relative slope index of 160%. Amongst the highest found.
Not everything is just related to deprivation. Air quality is more closely linked with urbanisation and motorways.

What are the health consequences?
Not in Employment, Education or Training (NEET) Wakefield District
Children aged 16-18
Ward values represented at Postcode level (2008)

Full District

Compare the South East and Castleford / Pontefract.
Further factors beyond deprivation here.
What is the impact of the economic infrastructure?

Most Deprived Quintile (Fifth)

Least Deprived Quintile (Fifth)
Six times as many NEET in the most deprived compared with the most affluent.
Relative slope index of 175%, the highest.
But the map shows more than just deprivation as an issue.
More than 35% of all adults smoke in many areas, whilst in others less than 15% smoke.

There are an estimated 80,000 smokers in the district.

Smoking is one of the single biggest contributors to reduced life expectancy; has a high RSI and there are effective actions.
Overall smoking prevalence 5% higher than England, a high relative slope index of 90%, an estimated 80,000 smokers in the district and highly effective interventions make this a top priority area.
There are a lot of obese people in Wakefield and there is no sign of things improving.

With a relative slope index of 40%, action on obesity would also impact on inequalities.
The Wakefield District Population is split across about 8,000 postcodes. There are an average 41 people registered at each postcode.

**Which is the stronger link: Deprivation or Coal Mining?**

**Why is Normanton spared?**

### Chronic Obstructive Pulmonary Disease (COPD), 2009/10

**Sources:**
- Practice Registered Population, WYCSA, 2010
- QOF, 2010

**Benchmarks:**
- England Prevalence = 1.6%
- PCT Prevalence = 2.1%

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With an overall prevalence nearly twice the England average; worst rates even in the most affluent parts of the district and a relative slope index of 50%, COPD is a local priority even if not a national one.
The Wakefield District Population is split across about 8,000 postcodes. There are on average 41 people registered at each postcode.

Sources:
Practice Registered Population, WYCSA, 2010
QOF, 2010

Coronary Heart Disease (CHD), Wakefield District, Estimated Prevalence (%) by Postcode (2009/10)

Estimations based on Practice Disease Registers

Significantly higher levels than England across the district,
Maybe an East / West split?
Is it really related to the policies of the previous two PCTs?
Why has all Knottingley, deprived or not, got 5% higher levels of hypertension compared to South Elmsall?
What is the difference?
With a RSI of 7%, limited inequality.
There may be a lot more strokes than nationally, but tackling it is not going to reduce health inequalities.

Stroke is an outcome for hypertension.

Age may be the main factor in geographical patterns.
Mental Health, Wakefield District

Estimated Prevalence (2009/10)

Estimations based on Practice Disease Registers

What is the difference between Wakefield city and Pontefract?
The numbers are small!

The Wakefield District Population is split across about 8,000 postcodes. There are on average 41 people registered at each postcode.

The Benchmarks:
- England Prevalence = 0.77%
- PCT Prevalence = 0.72%

Sources:
Practice Registered Population, WYCSA, 2010
QOF, 2010

Contains Ordnance Survey data © Crown copyright and database right 2010
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Alcohol Attributable Admissions, Wakefield District.
Females
Estimated rate per 1,000 population.
LSOA Values represented at Postcode level (2009/10)

What is happening in Knottingley?
What are the factors driving the overall pattern?
Moving towards double the national average, a large slope index of 65%, puts Alcohol high on the agenda. But don’t expect any sudden enlightenment or effective fiscal intervention from the national government.
Most Deprived Quintile (Fifth)

Is this another East/West split?
If you want to start an epidemic find a location with lots of people and low immunisation levels.
Where do you suggest?
Prescribing of Drugs used in the Treatment of Diabetes. Wakefield District
Estimated Actual Cost per head of registered population (£’s) by Postcode (2009/10)

Why the mismatch in Featherstone?
Are the local services different there?
Prescribing of Statins.
Wakefield District
Estimated Actual Cost per head
of registered population (2009/10)

Does this reflect need or previous East/West healthcare policies?
Compare Pontefract and Hemsworth.

Prevalence of CHD

Prescribing

Sources:
Practice Registered Population, WYCSA, 2010
ePACT, 2010
QOF, 2010
Prescribing of Warfarin.
Wakefield District

What is driving this pattern?
Where are the clinics located?
Is this a reflection of need or supply?
Prescribing of Drugs used in the Treatment of Obesity.
Wakefield District

Estimated Actual Cost per head of registered population (£’s) by Postcode (2009/10)

Prevalence of Obesity

Why is Ryhill / Havercroft different?
Is this variation in clinical practice?
Nearly double the rate for the most deprived population, and many don’t have a car.
Large numbers; double the rates and a high slope index.

The trends are wrong. What are the causes?

Is government policy on Alcohol adequate?
Cancer Mortality – Wakefield District
Indirectly Standardised Rate per 100,000 MSOA values represented at Postcode level (2003 – 2007 pooled)

Significant variation within the most deprived quintile.
Is this small numbers or real variation, and why?
Wakefield Life Expectancy
2003-2005 to 2006-2008

That red line is going the wrong way!

Wakefield avg.
Most Deprived
Least Deprived
England avg.
All Cause Mortality (all ages - pooled 2005-2008)
annualised age standardised rates (DSR) per 100,000 population
(95% confidence intervals)

Least Deprived
Mid Deprived
Most Deprived
England Avg.

Double the mortality rate
<table>
<thead>
<tr>
<th>Indicators</th>
<th>Numerator</th>
<th>Numerator Description</th>
<th>District average</th>
<th>Relative Slope Index %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of NEET (Not in Education, Employment or Training)</td>
<td>1,190</td>
<td>People</td>
<td>9.1%</td>
<td>176.8</td>
</tr>
<tr>
<td>Benefit Claimants</td>
<td>35,725</td>
<td>People</td>
<td>17.9%</td>
<td>161.8</td>
</tr>
<tr>
<td>Tenure Ownership</td>
<td>92,351</td>
<td>Households</td>
<td>64.3%</td>
<td>-104.8</td>
</tr>
<tr>
<td>GCSE Attainment (SA*-C GCSE including English &amp; Maths)</td>
<td>3,670</td>
<td>Students sitting an exam</td>
<td>50.1%</td>
<td>-102.6</td>
</tr>
<tr>
<td>Smoking - Estimated Prevalence</td>
<td>56,988</td>
<td>People</td>
<td>31.4%</td>
<td>90.5</td>
</tr>
<tr>
<td>Alcohol Admissions - Males</td>
<td>3,233</td>
<td>Admissions</td>
<td>20.5</td>
<td>81.6</td>
</tr>
<tr>
<td>Emergency Admissions</td>
<td>35,444</td>
<td>Admissions</td>
<td>107.5</td>
<td>67.4</td>
</tr>
<tr>
<td>A&amp;E Attendances</td>
<td>115,459</td>
<td>Attendances</td>
<td>358.2</td>
<td>66.5</td>
</tr>
<tr>
<td>Alcohol Admissions - Females</td>
<td>1,868</td>
<td>Admissions</td>
<td>11.4</td>
<td>65.1</td>
</tr>
<tr>
<td>COPD - Estimated prevalence</td>
<td>8,231</td>
<td>People</td>
<td>2.5%</td>
<td>52.1</td>
</tr>
<tr>
<td>Household income (Average)</td>
<td>143,638</td>
<td>Households</td>
<td>£29,988</td>
<td>-43.4</td>
</tr>
<tr>
<td>Obesity - Estimated Prevalence</td>
<td>34,903</td>
<td>People</td>
<td>5.1%</td>
<td>39.2</td>
</tr>
<tr>
<td>Mental health - Estimated prevalence</td>
<td>2,366</td>
<td>People</td>
<td>0.7%</td>
<td>27.9</td>
</tr>
<tr>
<td>Diabetes - Estimated prevalence</td>
<td>15,127</td>
<td>People</td>
<td>5.7%</td>
<td>22.8</td>
</tr>
<tr>
<td>Access to Smoking Cessation Services - Smoking Quitters</td>
<td>3,136</td>
<td>People</td>
<td>46.2%</td>
<td>-22.1</td>
</tr>
<tr>
<td>CHD - Estimated prevalence</td>
<td>14,894</td>
<td>People</td>
<td>4.5%</td>
<td>15.4</td>
</tr>
<tr>
<td>Childhood Immunisations - 5 Year</td>
<td>3,151</td>
<td>People</td>
<td>90.9%</td>
<td>-8.7</td>
</tr>
<tr>
<td>Hypertension - Estimated prevalence</td>
<td>47,545</td>
<td>People</td>
<td>14.4%</td>
<td>7.6</td>
</tr>
<tr>
<td>Childhood Immunisations - 5 Year</td>
<td>3,094</td>
<td>People</td>
<td>89.2%</td>
<td>-7.1</td>
</tr>
<tr>
<td>Stroke - Estimated prevalence</td>
<td>8,675</td>
<td>People</td>
<td>2.1%</td>
<td>4.8</td>
</tr>
<tr>
<td>USC (Urgent Suspected Cancer) Referral Rates</td>
<td>1,164</td>
<td>Referrals</td>
<td>74.7%</td>
<td>-2.7</td>
</tr>
<tr>
<td>Diabetes - (Drugs used in the treatment of)</td>
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<tr>
<td>Statins</td>
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<td>Warfarin</td>
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<tr>
<td>Obesity - (Drugs used in the treatment of)</td>
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</tr>
</tbody>
</table>

Maybe start with the biggest numerators and highest relative slope indices, if we want to make maximum impact on inequalities.
Conclusions

• Each indicator pattern is shaped differently by the impacting factors

• The full report can identify areas to target or audit or with unexplained variation

• Most impact on inequalities is likely to be made where:
  – Many people are affected
  – There is a large relative slope index
  – There is an effective intervention