Health Inequalities
“preventing early death”

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Health Inequalities Unit
14th June 2007
Overview

- Life expectancy
- Early death
- What we can do about it
- What are we doing
- Conclusion
Health Inequalities PSA Target:

By 2010 to reduce inequalities in health inequalities by 10% by 2010 as measured by infant mortality and life expectancy at birth.

This target is underpinned by two more detailed objectives:

- starting with children under one year, by 2010 to reduce by at least 10 per cent the gap in mortality between routine and manual groups and the population as a whole;

- Starting with Local Authorities, by 2010 to reduce by at least 10% the gap in life expectancy between the fifth of areas with the “worst health and deprivation indicators” and the population as a whole.
Life Expectancy at birth - Male

Male life expectancy at birth
England 1993-2005 and target and projection for the year ‘2010’

3 year average

Target:
10% minimum reduction in relative gap, from 1995-97 baseline

Target Reduction


Source: ONS data, analysed by DH analysts
**Female life expectancy at birth**
England 1993-2005 and target and projection for the year ‘2010’

3 year average

- **Target:** 10% minimum reduction in relative gap, from 1995-97 baseline

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Source: ONS data, analysed by DH analysts
So did this matter locally?

Results of high level review

- Lack of engagement with target
- Unaware of local “gap”
- Little knowledge of interventions that would deliver by 2010
- Focus of local work on wider determinants
- Discounting of target
- ?Saving a few years at the end of life?

Is there another way of looking at the target?
13,700 early deaths in Spearhead areas

a more compelling story?
Too many people in Spearhead areas are dying early

- There were approximately 13,700 additional deaths for 30 to 59 year olds in Spearhead groups, across the 3 years 2003-2005, compared to the national average for England.
- The focus needs to be on reducing adult early deaths.
- Action on the overall PSA target to reduce infant mortality will also help deliver the reduction in life expectancy gap target.
Know Your Gap
1) Know your gap - England
What is causing the gap for males

The Gap – for males

- 35% All circulatory diseases, 70% of which are Coronary Heart Disease (CHD)
- 18% All cancers, 61% of which are lung cancer
- 15% Respiratory diseases, 53% of which are chronic obstructive airways disease
- 10% Digestive, 50% of which are chronic liver disease and cirrhosis
- 5% External causes of injury and poisoning, 60% of which are suicide and undetermined death
- 2% Infectious & parasitic diseases
- 10% Other
- 5% Deaths under 28 days

Contribution to Life Expectancy Gap in Males
Breakdown by disease, 2003
And what can you do about it?

The Interventions

Targeted:
- Smoking cessation clinics: double capacity in Spearhead areas for 2 years
- Secondary prevention of CVD: additional 15% coverage of effective therapies in Spearhead areas 35-74 yrs
- Primary prevention of CVD in hypertensives under 75yrs:
  - 40% coverage antihypertensives
  - statin therapy
- Primary prevention of CVD in hypertensives 75yrs +:
  - 40% coverage antihypertensives
  - statin therapy
- Other*, including:
  - Early detection of cancer
  - Respiratory diseases
  - Alcohol related diseases
  - Infant mortality

Universalist:
- Smoking reduction in clinics – as at present
- Secondary prevention of CVD: 75% coverage of 35-74 yrs
- Primary prevention of CVD in hypertensives under 75 yrs:
  - 20% coverage antihypertensive statin therapy

The Impact – for males

- Contribution to Life Expectancy Gap in Males
  - 20% coverage antihypertensive statin therapy
  - 11%

Breakdown by disease, 2003

- 8.9%
  - 1.4%
  - 0.2%
  - 0.2%
  - 2.3%
  - 1.0%
  - 0.7%
  - 1.2%
  - 0.7%
  - 2.1%
  - 0.2%
  - 1.0%
  - 0.2%
  - 0.7%
And for females?

The Gap – for females

- **30% All circulatory diseases**, 63% of which are Coronary Heart Disease (CHD)
- **16% All cancers**, 75% of which are lung cancer
- **21% Respiratory diseases**, 57% of which are chronic obstructive airways disease
- **9% Digestive**, 44% of which are chronic liver disease and cirrhosis
- **5% External causes of injury and poisoning**, 40% of which are suicide and undetermined death
- **2% Infectious & parasitic diseases**
- **11% Other**
- **6% Deaths under 28 days**

**Contribution to Life Expectancy Gap in Females**
Breakdown by disease, 2003

**Universalist:**
- Smoking reduction in clinics – as at present
- Secondary prevention of CVD: 75% coverage of 35-74yrs
- Primary prevention of CVD in hypertensives under 75 yrs: 20% coverage antihypertensives
- Primary prevention of CVD in hypertensives 75yrs +: 40% coverage antihypertensives

**Targeted:**
- Smoking cessation clinics: double capacity in Spearhead areas for 2 years
- Secondary prevention of CVD: additional 15% coverage of effective therapies in Spearhead areas 35-74 yrs
- Primary prevention of CVD in hypertensives under 75yrs: 40% coverage antihypertensives
- Primary prevention of CVD in hypertensives 75yrs +: 40% coverage antihypertensives
- Other*, including:
  - Early detection of cancer
  - Respiratory diseases
  - Alcohol related diseases
  - Infant mortality

*locally determined

**Further modelling of Other actions will need to contribute the remaining 5.6%**
So what can we do about this?

- Understand cause of local gap
- Model interventions
- Plan & IMPLEMENT interventions
Know your local gap: Health Inequalities Intervention Tool (1)

PROTOTYPE

Health Inequalities Intervention Tool

Welcome to the Health Inequalities Intervention Tool

This tool is designed to support Spearhead Primary Care Trusts with their Local Delivery Planning and commissioning. It is designed to help achieve the Department of Health (DH) Public Service Agreement (PSA) target for life expectancy.

The DH PSA target on life expectancy aims to by 2010 reduce by at least 10% the gap between the Spearhead areas and the population as a whole.

This tool provides information on the following:

- The current life expectancy in Spearhead local authorities
- The current gap in life expectancy between the Spearhead local authorities and England
- A breakdown of the causes of the life expectancy gap by disease type and age

It allows Spearhead areas to estimate the effect on their life expectancy gap if certain interventions are increased, specifically:

- Interventions to reduce infant mortality
- Smoking cessation
- Antihypertensive prescribing in people without diagnosed cardiovascular disease
- Statin prescribing in people without diagnosed cardiovascular disease

This model should be used with reference to the information on why these interventions were chosen and further background information. For this information please see http://www.hsc.org.uk/Pages/howResource.aspx?id=11253

For technical information on how this model was put together please see http://www.hsc.org.uk/viewResource.aspx?id=11256
To view frequently asked questions go to http://www.hsc.org.uk/viewResource.aspx?id=11254

The tool was developed by London Health Observatory and Yorkshire and Humber Public Health Observatory on behalf of the Association of Public Health Observatory for the Department of Health.
### Life expectancy gap by disease (2002-04)

<table>
<thead>
<tr>
<th>Disease</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infectious and parasitic diseases</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>Oesophageal cancer</td>
<td>0.2%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Stomach cancer</td>
<td>0.6%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>0.8%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>2.4%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Breast cancer</td>
<td>0.0%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Other cancers</td>
<td>3.5%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Endocrine, nutritional, metabolic diseases</td>
<td>2.1%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Mental and behavioural disorders</td>
<td>9.1%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Diseases of nervous system</td>
<td>3.2%</td>
<td></td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>0.6%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Heart failure</td>
<td>0.7%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Stroke</td>
<td>6.5%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Other cardiovascular disease</td>
<td>8.3%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>3.5%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Chronic obstructive airways disease</td>
<td>5.6%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Other respiratory disease</td>
<td>1.0%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Stomach/duodenal ulcer</td>
<td>1.5%</td>
<td>2.1%</td>
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<tr>
<td>Chronic cirrhosis of the liver</td>
<td>12.3%</td>
<td>13.0%</td>
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<tr>
<td>Other digestive diseases</td>
<td>4.2%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Musculoskeletal diseases</td>
<td></td>
<td></td>
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<tr>
<td>Genitourinary diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perinatal conditions</td>
<td>0.1%</td>
<td></td>
</tr>
<tr>
<td>Congenital anomalies</td>
<td></td>
<td>0.2%</td>
</tr>
<tr>
<td>Ill defined conditions</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>Road traffic accidents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other accidents</td>
<td>9.2%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Suicide and undetermined injury</td>
<td>12.0%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Other external causes</td>
<td>0.3%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1.3%</td>
<td></td>
</tr>
<tr>
<td>Deaths under 20 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

### Life expectancy gap by age (2002-04)

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 yr</td>
<td>1.4%</td>
<td></td>
</tr>
<tr>
<td>01 - 04</td>
<td>4.9%</td>
<td>0.2%</td>
</tr>
<tr>
<td>05 - 09</td>
<td>1.1%</td>
<td></td>
</tr>
<tr>
<td>10 - 14</td>
<td>2.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>15 - 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 - 24</td>
<td>3.5%</td>
<td>1.7%</td>
</tr>
<tr>
<td>25 - 29</td>
<td>5.9%</td>
<td>2.0%</td>
</tr>
<tr>
<td>30 - 34</td>
<td>6.8%</td>
<td>2.3%</td>
</tr>
<tr>
<td>35 - 39</td>
<td>10.7%</td>
<td>2.5%</td>
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<td>40 - 44</td>
<td>6.0%</td>
<td>6.2%</td>
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<tr>
<td>45 - 49</td>
<td>7.9%</td>
<td>5.2%</td>
</tr>
<tr>
<td>50 - 54</td>
<td>4.0%</td>
<td>12.4%</td>
</tr>
<tr>
<td>55 - 64</td>
<td>12.2%</td>
<td>10.5%</td>
</tr>
<tr>
<td>65 - 69</td>
<td>7.1%</td>
<td>13.0%</td>
</tr>
<tr>
<td>70 - 74</td>
<td>8.6%</td>
<td>8.9%</td>
</tr>
<tr>
<td>75 - 79</td>
<td>2.4%</td>
<td>10.4%</td>
</tr>
<tr>
<td>80 - 84</td>
<td>4.3%</td>
<td>8.4%</td>
</tr>
<tr>
<td>85 - 99</td>
<td>2.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td>90+</td>
<td>1.2%</td>
<td>1.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Local Planning: Model what to do about it (3)

Health Inequalities Intervention Tool

**STEP 1 - Select local area:**

- **View Your Gap**

**STEP 2 - View a breakdown of gap by disease and age:**

**STEP 3 - Select intervention(s) and input user data:**

- **SMOKING CESSATION**
  - What is your planned number of quitters in the coming year? 1,600

- **INFANT MORTALITY**
  - Male: 10; Female: 6

- **ANTIHYPERTENSIVE**
  - Male: 0%; Female: 0%

- **STATIN**
  - Male: 0%; Female: 0%

**Current local authority information**

- **Persons**
  - 1,303

- **Number of infant deaths in 2002-04**
  - Male: 15; Female: 8

- **On track to meet life expectancy target**
  - at 2002-04
    - No
  - at 2003-05
    - No

- **Life expectancy in years (2002-04)**
  - Male: 72.8; Female: 78.3

- **Life expectancy gap (2002-04)**
  - Male: 4.8%; Female: 3.2%

**Results**

- **New life expectancy in years**
  - Male: 73.0; Female: 78.4

- **New life expectancy gap**
  - Male: 4.5%; Female: 3.1%

- **Effect of interventions on life expectancy gap**
  - 4.5% narrowing; 3.4% narrowing

- **Absolute change in all-age all-cause mortality rate**
  - 13.8 decrease; 5.2 decrease
Summary

- Smoking, CVD prevention & cancer key
- Health services central to delivery
- Life expectancy 2010 is about preventing early death
- Achieve Balance
Achieving Balance

Health Inequalities

2010 Target

Wider Social Determinants
Web addresses

- Health Inequalities Intervention Tool
  - www.lho.org.uk/HEALTH_INEQUALITIES/Health_Inequalities_Tool.aspx
- Commissioning framework for health & Well being
- Programme Budgeting
  - nww.nchod.nhs.uk/
- Health Equity Audit
  - www.dh.gov.uk/healthinequalities
- Health Poverty Index
  - www.hpi.org.uk/
Contact:

- Chris Lovitt
- Health Inequalities Unit
- Chris.lovitt@dh.gsi.gov.uk
- 020 7972 5109
DH has aligned incentives for the NHS and Local Government:

- New line on All Age All Cause Mortality as proxy for life expectancy is now mandatory for Spearheads as part of the LAA and LDP processes

- Same Local trajectories agreed in LAA and LDP, based on nationally provided indicative figures

- LDP Refresh: strengthened inequalities elements of existing Blood Pressure, Cholesterol, Practice Based Registers and, in some Spearhead Areas, smoking cessation
Local Planning: Know your Spending
Programme Budgeting – CVD Correlation

CVD Mortality

Spearman Rank Correlation Coeff. (r) = -0.26  
p (2-sided) > 0.05

CVD Spend

CVD Mortality

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Local Planning: Health Equity Audit

1. Agree partners and issues
   - Choose issue(s) with highest impact eg cancer, CHD, primary care, over 50s, infant health
   - Relate issues to service planning & commissioning, take opportunities where changes are planned
   - Identify factors driving low life expectancy
   - Take on views of front line staff and users
   - Scope for joining up services with local government

2. Equity profile: identify the gap
   - Use data to compare service provision with need, access, use & outcome
     - measures including proxies for disadvantage, social class, ward in the bottom quintile, BME, gender or other population group
     - Focus on the third of population with poorest health outcomes

3. Agree high impact local action to narrow the gap
   - Quality & quantity of primary care in disadvantaged areas
   - Address inequalities through NSF implementation
   - Commission new services, change or amend existing contracts
   - Develop LIFT projects where health need is highest
   - Holistic services through partnerships

4. Agree priorities for action
   - Identify highest impact interventions for effective local action, for example:
     - Diet & physical activity
     - Promoting healthy life styles in over 50’s
     - Ensure choice, responsiveness & equity for all
     - Smoking prevalence
     - Screening
     - Flu vaccinations
     - Accidents
     - Statins & antihypertensives

5. Secure changes in investment & service delivery
   - Move resources to match need
   - Develop service delivery to match need
   - Ensure changes in contracts & commissioning are reaching areas & groups with highest need

6. Review progress & assess impact
   - Ensure effective monitoring systems are in place using indicators etc
     - Review progress
     - Assess the impact of action, has change been made and is it fast enough?
     - Identify local areas or groups where more action is required

Use data on Health Inequalities to support decisions at all levels: make appropriate comparisons by area, ethnicity, socio-economic group, gender, age etc
Commissioning Framework for Health & Well Being

- Launched March 2007; three month consultation
- Key development in system reform agenda
- Focus on promoting health and well-being, including prevention of ill-health
- Stronger focus on commissioning for outcomes to reduce inequalities
- Emphasises importance of strong partnerships
- Recognises potential role of third sector
- Duty of strategic needs assessment
Joint Strategic Needs Assessment

- Key building block of the commissioning process
- Will be a duty of the local authority and the PCT (DPH, DASS, DCS)
  - LAA and local targets based on the SNA
- Must be focussed on outcomes
- Must be focussed on the future
  - 3-5 years: improvements in outcomes/reductions in health inequalities
  - 5-15 years: for major infrastructure planning (transport, housing, healthcare facilities)
  - 1 year: contractual changes at frontline / PBC level
National Planning and Alignment of Incentives → Joint Local Planning

DH has aligned incentives for the NHS and Local Government:

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