Health Equity Indicators for the NHS

Richard Cookson
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**Report Title:** Health equity indicators for the English NHS
http://www.nets.nihr.ac.uk/projects/hsdr/11200439

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**Core Research Team:** Miqdad Asaria, Shehzad Ali, Richard Cookson (York)
Health and Social Care Act 2012
Inequalities Duty – CCGs

“14T Duties as to reducing inequalities

Each clinical commissioning group must, in the exercise of its functions, have regard to the need to—

(a) reduce inequalities between patients with respect to their ability to access health services, and
(b) reduce inequalities between patients with respect to the outcomes achieved for them by the provision of health services.”
Benefits to the NHS

1. First comprehensive suite of indicators for annual national monitoring of socioeconomic inequalities in health care access, quality and outcomes

2. First and only indicators for detailed local monitoring of health care equity for quality improvement
   - Our indicators examine inequality within CCGs and identify CCGs doing better or worse than England as a whole in reducing socioeconomic gradients in healthcare
   - Not just the old story that deprived NHS areas do badly because they have poor health: deprived NHS areas can do well at tackling health inequalities within their patch
   - NHS areas can learn quality improvement lessons from similar areas doing better or worse than average on equity
Prototype Indicator Tools

1. **Equity Dashboards**: 1-page summary
2. **Equity Chartpacks**: in-depth information in a standard format
3. **Equity Custom Graphs**: create your own graphs

- At both national and local (CCG) levels
- Comprehensive suite of visualisation tools to help decision makers and members of the public understand complex inequality patterns
National Findings 2004-2011
Equity-Oriented Primary Care Strengthening 2004-11

1. Primary care P4P investment from 2004
   – “Quality and Outcomes Framework”

2. New GP practices in under-doctored areas from 2008-10
   – e.g. “Equitable Access to Primary Medical Care”

3. Proactive local support and guidance on how to reduce health inequality from 2007-9
   – e.g. “Health Inequalities National Support Team”

• All part of the world’s first cross-government strategy for reducing health inequality
Monitoring health care access, quality and outcomes at key stages of the patient pathway

A. Home

B. Primary and Community Care

C. Hospital

D. Death

1. Primary care Supply
2. Primary Care Quality
3. Hospital waiting time
4. Preventable hospitalisation
5. Repeat hospitalisation
6. Dying in hospital
7. Amenable Mortality
Equity of Primary Care Supply

Indicator 1: Patients per GP within neighbourhoods (~1,500 people) ranked by deprivation

GP supply increased in all social groups, and the largest increases were in the most deprived areas. Pro-rich inequality gradient eliminated by 2011/12: middle rank neighbourhoods now worst off.
Indicator 1. Primary Care Supply: Patients per full time equivalent GP, excluding registrars and retainers, adjusted for age, sex and health deprivation
Indicator 4. Preventable Hospitalisation: hospitalisations per 1,000 population for conditions amenable to healthcare adjusted for age and sex

IMD Group
- Q1 (most deprived)
- Q2
- Q3
- Q4
- Q5 (least deprived)
Indicator 7. Amenable Mortality: deaths per 1,000 population from causes amenable to health care adjusted for age and sex.
# National NHS Equity Dashboard 2011/12

<table>
<thead>
<tr>
<th>Indicators of Health Care Access and Outcome</th>
<th>Average</th>
<th>Equity (Slope Inequality Index)</th>
<th>Overall Equity Trend</th>
<th>Inequity Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current</td>
<td>Trend</td>
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</tr>
<tr>
<td>1. Primary care supply (patients per GP)</td>
<td>1,689</td>
<td>17.3</td>
<td>-39.08</td>
<td>-105.58</td>
</tr>
<tr>
<td>2. Primary care quality (%)</td>
<td>77.4%</td>
<td>0.58%</td>
<td>1.45%</td>
<td>-0.34%</td>
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<tr>
<td>3. Hospital waiting time (days)</td>
<td>62.9</td>
<td>3.61</td>
<td>2.16</td>
<td>2.99</td>
</tr>
<tr>
<td>4. Preventable hospitalisation (per 1,000)</td>
<td>5.70</td>
<td>-0.15</td>
<td>5.96</td>
<td>-0.06</td>
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<td>5. Repeat hospitalisation (%)</td>
<td>14.4%</td>
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<td>0.47%</td>
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<td>6. Dying in hospital (%)</td>
<td>43.4%</td>
<td>-3.51%</td>
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<td>0.37%</td>
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<tr>
<td>7. Amenable mortality (per 1,000)</td>
<td>2.51</td>
<td>-0.24</td>
<td>1.37</td>
<td>-0.16</td>
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<td>8. Mortality (per 1,000)</td>
<td>8.47</td>
<td>-0.28</td>
<td>4.72</td>
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Figures adjusted as appropriate for age, sex and ill-health. See indicator notes for definitions.

**Key:**
- **Getting better**
- **Not significant**
- **Getting worse**
- **Up** Getting better
- **Not clear**
- **Down** Getting worse
Local Equity Monitoring
Equity-Oriented Primary Care Strengthening 2004-11

1. Primary care P4P investment from 2004
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2. New GP practices in under-doctored areas from 2008-10
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GP supply increased in all social groups, and the largest increases were in the most deprived areas. Pro-rich inequality gradient eliminated by 2011/12: middle rank neighbourhoods now worst off.
England NHS Equity Performance 2004/5 to 2011/12

Indicator 1. Primary Care Supply

Relative Index of Inequality

Slope Index of Inequality

*Indicator 1. Primary Care Supply: Patients per full time equivalent GP, excluding registrars and retainers, adjusted for age, sex and health deprivation*
Indicator 4. Preventable Hospitalisation: hospitalisations per 1,000 population for conditions amenable to healthcare adjusted for age and sex
Indicator 7. Amenable Mortality: deaths per 1,000 population from causes amenable to health care adjusted for age and sex
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**Key**

- Getting better
- Not significant
- Getting worse

**Legend**

- ↑ Getting better
- ↔ Not clear
- ↓ Getting worse
National Inequality Gradient
Potentially Avoidable Emergency Admissions
(Ambulatory Care Sensitive Chronic Conditions)
By Deprivation Quintile Group

Source: Hospital episode statistics for 2011/12; indirectly age-sex adjusted
Local Inequality Gradient

Potentially Avoidable Emergency Admissions
Neighbourhoods Within Fictional NHS CCG

Indicator 4. Preventable Hospitalisation: hospitalisations per 1,000 population for conditions amenable to healthcare adjusted for age and sex
Clinical Commissioning Groups in 2011
Local Inequality in Potentially Avoidable Admissions
(with 95% confidence interval)

CCGs with better than average equity performance

CCGs with worse than average equality performance

Your CCG

Indicator 4. Preventable Hospitalisation: hospitalisations per 1,000 population for conditions amenable to healthcare adjusted for age and sex
Local Authority Trends from 2004 to 2011
Local Inequality in Care Sensitive Admissions

Hyndburn (worsening)

Local Authority Average (slight improvement)

Reigate (improving)
Equity of Primary Care Supply
NHS Hull 2004/5

Indicator 1: Patients per GP
within neighbourhoods (~1,500 people)
ranked by deprivation

Patients per full time equivalent GP, excluding registrars and retainers, adjusted for age, sex and health deprivation
Equity of Primary Care Supply
NHS Hull 2010/11

Indicator 1: Patients per GP
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Indicator 1. Primary Care Supply: Patients per full time equivalent GP, excluding registrars and retainers, adjusted for age, sex and health deprivation
### Mock-up local dashboard

#### NHS Equity Dashboard 2011/12: Lambeth

<table>
<thead>
<tr>
<th>Indicators of Health Care Access and Outcome</th>
<th>Average</th>
<th>CCNGI Equity Compared With Other CCGs (slope inequality index)</th>
<th>Overall Equity Trend</th>
<th>Deprived Population: 106,765 (37% of the CCG)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>England</strong></td>
<td><strong>CCG</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Primary care supply (patients per GP)</td>
<td>1,689</td>
<td>1,322</td>
<td>[ ] <img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /> no gap</td>
</tr>
<tr>
<td>2. Primary care quality (%)</td>
<td>77.4%</td>
<td>74.1%</td>
<td>[ ] <img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /> no gap</td>
</tr>
<tr>
<td>3. Hospital waiting time (days)</td>
<td>62.9</td>
<td>66.1</td>
<td>[ ] <img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /> no gap</td>
</tr>
<tr>
<td>4. Preventable hospitalisation (per 1,000)</td>
<td>5.70</td>
<td>7.58</td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Red" /> 1,421 people admitted</td>
</tr>
<tr>
<td>5. Repeat hospitalisation (%)</td>
<td>14.4%</td>
<td>15.2%</td>
<td>[ ] <img src="#" alt="Green" /></td>
<td><img src="#" alt="Red" /> 2,055 people admitted</td>
</tr>
<tr>
<td>6. Dying in Hospital (%)</td>
<td>43.4%</td>
<td>40.4%</td>
<td>[ ] <img src="#" alt="Green" /></td>
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</tr>
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<td>7. Amenable mortality (per 1,000)</td>
<td>2.51</td>
<td>2.55</td>
<td>[ ] <img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /> 128 deaths</td>
</tr>
<tr>
<td>8. Mortality (per 1,000)</td>
<td>8.47</td>
<td>8.33</td>
<td>[ ] <img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /> 809 deaths</td>
</tr>
</tbody>
</table>

**Legend:**
- Below average
- Not significant
- Above average

**Notation:**
- Green: Better
- Red: Worse
- Yellow: Not clear
- Clearly "pro-poor"
Thank you.