1: Why bother about equality?

- **Simple sad facts:**
  - Inequalities in health and health care can be observed (nearly) everywhere

- **Policy objectives to *reduce* inequalities**
  - Health care
    - ‘Equal access (to health care) for equal (health) needs’
  - Health
    - Reduce ‘unfair inequalities’ in health, particularly ‘social inequalities’
Why inequalities in health?

- Inequalities in health care use
  - Preferences
    - Access vs use
  - Income
    - Ability to pay
  - Supply side
    - Geographical access depends on population density

- Inequalities in the *determinants* of health

Three sets of determinants of ill health

- Factors *outside* own control
  - Nature
    - Unlucky in the biological lottery
  - Stochastic events
    - Victim of external infliction

- Environmental exposures
  - Physical
    - Pollution
  - Social
    - Deprivation

- Factors *inside* own control
  - Health related life-style (diet, exercise, substance use)
    - Choices, efforts, preferences
    - Social conditioning, cultural habits
2: What do we mean by ‘equal need’?
‘Equal access for equal need’

- Need as ill health (severity)
- Need as capacity to benefit

Unequal access for unequal need (?)

- Need as ill health \( H_i = H_i \)
- Need as capacity to benefit \( \Delta H > \Delta H \)
Unequal access for unequal need(?)

- Need as ill health \( H_i < H_j \)
- Need as capacity to benefit \( \Delta H = \Delta H \)

Unequal access for unequal need

- Need as ill health \( H_i < H_j \)
- Need as capacity to benefit \( \Delta H < \Delta H \)
3: Preferences for equality

• ‘Caring externality’ (Culyer, 1971)
  – We simply care for our fellow citizens’ health

• Voluntary redistribution

• Altruism = ‘regard for others as a principle of action’
  – General (whichever goods that yield utility)
  – Paternalistic (sub-set of goods, e.g. health care)

Altruism

• General altruist
  \[ U_A = u(C_A, H_A, G, SR_A, U_B) \]

• Paternalistic altruist
  \[ U_A = u(C_A, H_A, G, SR_A, H_B) \]

• We care for more than one individual
  \[ U_A = u(C_A, H_A, G, SR_A, H_B, H_C) \]
General vs paternalistic altruism

• Transfers ‘in cash’ vs transfers ‘in kind’

• The recipient will always prefer to receive a given transfer in cash rather than the same value in kind, because he can use the cash to purchase the same good or a more preferred good

• But, if the donor has preferences for what the recipient should consume, the size of the transfer depends on which goods are being purchased – ‘He who pays the piper calls the tune’

Unselfish reasons why A care for B’s health

- Paternalistic altruist:
  \( H_B \rightarrow U_A \)

- General altruist:
  \( H_B \rightarrow T_B \rightarrow G \rightarrow U_A \)
4: Theories of distributive justice

• Utilitarianism
  – Max population health

• Egalitarianism
  – Equal distribution of health

• Rawls maximin
  – Prioritise the one who’s got least health

Utilitarianism
‘The greatest happiness principle’

• Pleasure and pain are what affect human well-being
• Pleasure promotion and pain avoidance can be measured in terms of *utils*
• Interpersonal comparisons of utility
• Different distributions of goods give different total happiness
• Which distribution gives the greatest total?

⇒ The greatest health principle
Egalitarianism

- The preferred distribution is the one which gives the most equal shares of the unit that is to be distributed
- General egalitarianism
  - Income, utility, well-being
- Specific egalitarianism
  - A more limited set of goods, e.g. ‘primary goods’, health
- Inequalities can be measured
  - Absolute difference between the top and the bottom
  - The relative difference

→ Equal health, or equal access to health care

Maximin

- Maximize the well-being for the one who has got least, i.e. ‘the worst off’
- Inequalities are accepted as long as they are to the benefit of ‘the worst off’
- Procedural part
  - Social contract behind ‘the veil of ignorance’

→ Prioritise the one who’s got least health
The 3 theories of justice give different recommendations

Where would you have preferred to be born – in Utilia, Egalia or Rawlia?

<table>
<thead>
<tr>
<th></th>
<th>U</th>
<th>E</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy life expectancies in two groups</td>
<td>69 – 78</td>
<td>70 – 70</td>
<td>71 – 74</td>
</tr>
<tr>
<td>Where is the average healthy life expectancy highest?</td>
<td>73.5</td>
<td>70</td>
<td>72.5</td>
</tr>
<tr>
<td>Where is the distribution of health most equal?</td>
<td>69/78 = 0.88</td>
<td>70/70 = 1</td>
<td>71/74 = 0.96</td>
</tr>
<tr>
<td>Where is the health best for 'the worst off'?</td>
<td>69</td>
<td>70</td>
<td>71</td>
</tr>
</tbody>
</table>

5: The efficiency-equality trade-off in health

- The health possibility frontier
- Which point is the most efficient?
- Which point gives equal health?
- Which point is the most preferred?
The health possibility frontier

- Fixed total health care budget to be distributed between two (groups of) patients, A and B

- The health production functions for each group are positive, but diminishing

- Health outcomes are measurable on a cardinal scale, e.g. QALYs, and interpersonally comparable

A health possibility frontier
The Pareto-efficient allocations
Efficiency as health maximization

Equality vs efficiency
Trade-offs:
Maximize social welfare

A more general health frontier
to distinguish between Equality and Rawls’ maximin
6: The opportunity cost of equity

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>A + B = total gain</th>
<th>Opportunity cost: Benefits forgone to B for 1 more to A</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>A-max</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>II</td>
<td>Equality</td>
<td>6</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>III</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>- 3</td>
</tr>
<tr>
<td>IV</td>
<td>4</td>
<td>13</td>
<td>17</td>
<td>- 2</td>
</tr>
<tr>
<td>V</td>
<td>Max sum</td>
<td>3</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>VI</td>
<td>Max sum</td>
<td>2</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>VII</td>
<td>1</td>
<td>16.7</td>
<td>17.7</td>
<td>- 0.3</td>
</tr>
<tr>
<td>VIII</td>
<td>B-max</td>
<td>0</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

From the table to a health frontier
Conceptual clarifications

• Equal access for equal need
  – Unequal access for unequal need

• Equality
  – Equality of what?

• Equity
  – Fair distribution

• Fair inequalities
  – If equal opportunities, or ‘choice-sets’

Fair inequalities

• ‘The task of the major theories of justice can be stated as justifying deviations from equality ... the burden of proof is on the advocate of an unequal distribution’ Elster (1992)

• ‘Not all health inequalities are unjust or inequitable’
  – WHO commission on social determinants of health (2007)

• So, when do we think that an observed inequality in health or health care is fair?
...and unfair equalities?

<table>
<thead>
<tr>
<th></th>
<th>Equality</th>
<th>Inequality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Unfair</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

If 2 exists, then by implication 3 also exists. Give examples.

7: Two hot topics

- **Avoidability**
  - Social level
    - ‘Society has a duty to reduce inequalities in health that are avoidable’

- **Responsibility**
  - Individual level
    - ‘People should be held responsible for their own health related behaviour’
Avoidability
From ‘The WHO commission on social determinants of health’ (2007)

• ‘The vast majority of inequalities in health, between and within countries, are avoidable and, hence, inequitable’

• ‘No country or region should have to live with ill-health that is avoidable’

• What does ‘avoidable’ mean in this context?

Responsibility and efforts

• A *moral* responsibility for taking care of own health? or
• A ‘cost responsibility’ for not imposing unnecessary financial burdens on fellow citizens?

• Do people have financial incentives for making healthy efforts?  
  – Yes, under individual health insurance  
  – No, under tax-financed systems, with no links between own payment and own expected health care costs

• Which incentives for healthy efforts can be introduced within a tax-financed system?
**Efforts / health related behaviour**

- **Prospectively**
  - Should variations in *future* sub-group efforts (e.g. smokers vs non-smokers) that yield differences in expected health gains be taken into account?

- **Retrospectively**
  - Should variations in *previous* behaviour that have caused the differences in health care needs influence people’s entitlements to care?

**Some lessons and implications**

- **Trade-off between maximizing population health vs equal distribution of health**
  - There are opportunity costs (benefits forgone) in reducing health inequalities

- **Within country: What are the *causes* of health inequalities?**
  - Unequal access to health care → improve access
  - Equal access, but unequal *use* of health care → accept preferences?
  - Biological variation → unavoidable? ☹️
  - Social deprivation → avoidable
  - Choices → should people be held responsible?

- **Towards ’equality of opportunities’**
  - If people should be held responsible for the financial implications of their unhealthy choices → information and indirect taxation
  - If ’circumstances at birth should not matter for a person’s chances in life’ → more focus on children’s health

- **Between countries**
  - The concept of the health frontier does not apply between countries
  - Global inequalities in life expectancies, and in access to health care, cannot be justified with reference to any theory of distributive justice