

P11C01 Health needs assessment

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Health Needs Assessment

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For Review Only

Introduction

The idea of health needs assessment is, on the face of it, straightforward - estimate the health needs of a population or sub group in a population and organize services accordingly. The English National Institute for Health and Care Excellence (NICE) defines Health Needs Assessment as “a systematic process used by NHS organizations and local authorities to assess the health problems facing a population. This includes determining whether certain groups appear more prone to illness than others and pinpointing any inequalities in terms of service provision. It results in an agreed list of priorities to improve healthcare in a particular area” (NICE, nd). In the United Kingdom health needs assessment has been used in a wide variety of settings. These have included Immigration Removal Centres (NHS England 2015), local NHS Organizations (NHS Kent and Medway, 2013); and by Local Authorities (Horsley and Hollingsworth, 2014; Derby City Public Health – Knowledge, Intelligence and Strategic Planning Council 2017). In an uncomplicated world the assessment of health need and health-care need should be a tool for tackling inequalities, a pre-requisite for the allocation of resources and the first step in planning and evaluating care (Stevens and Raftery, 1997). In practice however, measuring health needs is not straightforward. It raises difficult questions about health-care, equity, equality, fairness and justice (Gillam, Yates et al 2012).

Needs assessment embraces a variety of methods and techniques to gather information about populations (Health Development Agency, 2003). In the UK traditionally it has meant taking ‘a population-based, epidemiological and public health approach to the planning of health interventions’. That means using data about population patterns of health to do rational planning in order to meet the particular needs of all, or parts, of the community, taking account of equity, efficiency and affordability. In principle, this approach to needs assessment might be used as the basis for planning in any health system (Clarke. Powell et al 2009). It aspires to ‘maximize the appropriate delivery of effective health

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3 interventions or care ...in an evidence based way ... [to] maximize equity'
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5 (Powell, 2006).
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8 Globally however, the term health needs assessment is more widely used and
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10 deployed to mean a range of different things. Sometimes the approach is highly
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12 specific focusing on particular risks or specific diseases (Allchorne and Green
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14 2016; Cicero, Rosticci et al 2014; Nacul, Stewart et al 2014; Cox, Sherrill-
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16 Mittleman et al 2013). Sometimes it is aimed at special sub-groups and
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18 populations (Vyas, Chaudhary et al 2013; Ash and Mackereth, 2013) or for
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20 specific services (Ingold and Hicks, 2015), and particular populations at particular
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22 points in the life course (Pretty, 2014). In the United States its currency includes
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24 linkages to charity hospitals and the needs of disadvantaged groups who might
25
26 be eligible to use the hospital facilities or to determine what sorts of services
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28 ought to be provided (Apatu, Hamadi et al, 2018; Van Gelderen, Stacey et al
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30 2018). The US 2010 Patient Protection and Affordable Care Act created a new
31
32 legal requirement for non-profit hospitals to conduct Community Health Needs
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34 Assessments (CHNA) every three years to maintain not-for-profit status with the
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36 Internal Revenue Service (Fischer, Schwimmer et al 2018; Rosenbaum, 2013)
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38 and various techniques have been used to do this (Stone, Sierocki et al 2018;
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40 Franz, Skinner et al, 2017; Mathews, Coyle et al 2015; Pennel, McLeroy et al
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42 2015). Practice varies widely (Becker, 2015; Alfano-Sobsey, Ledford et al 2014).

41 The website of the US Centers for Disease Control and Prevention (CDC)
42
43 defines Community Health Assessment as a systematic examination of the
44
45 health status indicators for a given population that is used to identify key
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47 problems and assets in a community. The ultimate goal of this kind of community
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49 health assessment is to develop strategies to address the community's health
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51 needs and identified issues. A variety of tools and processes may be used
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53 according to CDC to conduct a community health assessment; the essential
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55 ingredients of which are community engagement and collaborative participation.
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57 <https://www.cdc.gov/stltpublichealth/cha/plan.html> Health needs assessment
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3 has also been used in the US in Medicaid enrolment (Leininger, Friedsam et al et
4 al 2014).
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8 In disaster zones the term denotes ways of getting emergency provision to the
9 population in the most acute of circumstances (Hong, Song et al, 2017; Malilay,
10 Heumann et al 2014) or assessing need after disaster has struck (Subaiya,
11 Moussavi, et al 2014). There is no single method or methodology applied, and
12 the term health needs assessment or just needs assessment has come to refer
13 to any way of making an assessment of need.
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19 20 **The UK population-based, epidemiological approach to health needs** 21 **assessment.** 22

23 We begin by focusing on the approach to needs assessment which originally
24 drew heavily on epidemiology and health economics. In this view assessment of
25 need must include an assessment of the effectiveness of interventions to meet
26 identified health needs (Mooney, 1992). The assumption is that the relative total
27 need can be measured sufficiently by just a few factors such as mortality or
28 morbidity rates. It emphasises quantification and objective comparative
29 measurement. This type of needs assessment is usually dependent on existing
30 or available data, it seldom involves generating new information from primary
31 research because this would be too expensive and take too long. Health needs
32 assessment tends therefore to be based pragmatically on the routine data
33 sources that are there already (Clarke, Powell et al 2009).
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44 There are a number of distinct steps. It begins with clear problem definition. To
45 do this, two questions need to be considered. What do we want to find out about
46 the population, and how can we go about finding it out? A series of further
47 questions can then be asked to help clarify the process: why is this assessment
48 needed now, who will be affected, what would the consequences be of doing
49 nothing, how much time is available, how can the results and the
50 recommendations be presented to maximal effect, are sufficient resources
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3 available, and how will the needs assessment be itself assessed and evaluated?
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5 (Clarke, Powell et al 2009).
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8 A detailed project plan identifying the component parts of the exercise should be
9 prepared. Central to the exercise will be an epidemiological assessment, which
10 will determine how many people in the population need care and at what level
11 and what services are available for them. It is important to identify the
12 denominator population, that is the total population or relevant sub- population
13 because otherwise it is very difficult to interpret prevalence (total number of
14 cases) and incidence (new cases in a given time period) (Clarke. Powell et al
15 2009). Collecting data like this tends to be more straightforward in developed
16 countries. In less developed countries data systems tend not to be so reliable,
17 although where data systems are less than optimal other options may be
18 available (Bonney, Morgan et al 2007).
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29 Details of the structure of the population need to be built into needs assessment;
30 the age, ethnic, occupational and geographical contours of the local population
31 and the patterns of health inequalities will be assessed and described (Kelly,
32 2010a). The level and severity of the diseases of interest need to be examined
33 at this stage too, along with an assessment of the prevalence of relevant risks -
34 for example levels of smoking, physical activity and alcohol consumption. In a
35 population with a significant number of Afro Caribbean people an assessment of
36 sickle cell disease might be a particular focus of interest, in a mining community
37 chest disease might command attention. The absolute number of people
38 suffering from the condition, and the degree of severity can then be calculated
39 (Clarke, Powell et al 2009). If assumptions have to be made in the absence of
40 data and proxy variables are used, these must be made explicit.
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51 The next stage is sometimes to develop an assessment of the clinical
52 effectiveness of interventions for the condition or conditions of interest. There are
53 a variety of ways of assessing effectiveness. However, if we are concerned to
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3 determine the clinical effectiveness of a medicine, or some other kind of
4 intervention, we will get a more accurate assessment if we use evidence in which
5 a control is used and potential biases are minimized. If this is so, we can be
6 reasonably sure that the observed size of the effect is a consequence of the
7 intervention not some other biasing factor. Some commentators suggest that
8 using only evidence drawn from the top of the evidence hierarchy to assess
9 clinical effectiveness is the way to do this (Clarke, Powell et al 2009). The
10 evidence hierarchy is a device which categorizes studies according to the
11 methods they have used and the degree of bias which is associated with the
12 methods. Randomized controlled trials (RCTs) and the meta analyses of such
13 trials rest at the top of the hierarchy as these methods are deliberately designed
14 to reduce bias and offer the greatest certainty that the observed relationship
15 between the independent and the dependent variable is the consequence of that
16 relationship, not some other factor.
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29 It is possible to make an assessment of the effectiveness of interventions by
30 examining clinical trial data for its quality or bias. So it would be quite
31 appropriate, but very time consuming, for someone conducting a needs
32 assessment, who is interested in the effectiveness of particular treatments, to
33 examine RCT findings directly. An easier route is to use the evidence of
34 effectiveness which has already been appraised for its quality in for example
35 Cochrane reviews. These are produced by Cochrane (formerly the Cochrane
36 Collaboration), a world-wide network of reviewers conducting quality appraisal of
37 primary intervention studies. Alternatively, data examined by the National
38 Institute for Health and Care Excellence (NICE) who conduct clinical and cost
39 effectiveness analyses of new technologies, treatment pathways and preventive
40 interventions in England can also be consulted. The assessment of effectiveness
41 is based on a set of principles which collectively are known as Health Technology
42 Assessment (Kelly and Moore, 2012).
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3 After the effectiveness analysis is complete a synthesis of the evidence is then
4 undertaken of the epidemiology in the local population, incidence and
5 prevalence, underlying risk factors, treatments and interventions ranked
6 according to effectiveness, along with evidence of cost effectiveness and actual
7 costs. These will, of necessity, be imprecise, but if assumptions are made explicit
8 they will suffice as a starting point for needs assessment (Clarke, Powell et al
9 2009).

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17 Once data have been collected on the local population of interest, the next stage
18 is to compare locally derived data with data from other places in a *comparative*
19 needs assessment. This allows an appraisal of the degree to which local
20 provision is consistent with what might be expected on the basis of the
21 comparisons. This is sometimes difficult because rates of interventions vary both
22 within and between countries, but the process is about putative differences
23 between the observed and the expected values rather than exactness. It is
24 important to consult with stakeholders at this point and genuine community
25 participation is important. Rapid needs assessment may come into play where
26 statistical and other data are unavailable (Clarke, Powell et al 2009). All of this is
27 brought together in a “case for change “document” which will outline what is in
28 place, what ought to be done, what stakeholders believe should be done and
29 what the community want done. Costed options are essential to inform
30 redistribution of resources. The final step is to act on the needs assessment and
31 implement a plan.
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44 Health systems are complex socio-technical arrangements consisting of people,
45 cultures and practices, organizational structures, equipment and technologies.
46 Health systems are constrained, because whatever the system, the resources to
47 fund them are finite. Because of finite resources it is not possible to do
48 everything, to fulfill every need or to adopt every new drug, procedure or device.
49 At the same time demand for health services rises because expectations of what
50 medicine can achieve increase. People, especially in advanced societies,
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3 frequently think that they deserve or have some entitlement to – that they *need* -
4 the best and most up to date medicines and procedures. The availability of a
5 medicine therefore often creates the demand *and* the need for it – patients want
6 it and doctors want to use it. All of this adds to the demands on the resources in
7 the system.
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13 Health systems have to adapt to constantly evolving inputs in the form of new
14 medicines, medical technologies and approaches to medical and surgical
15 interventions. Decisions have to be made about the adoption and use of these
16 new things. In addition, the health needs of populations are complex and change.
17 For example, the age and ethnicity distributions of populations alter. Not only do
18 populations change, but health systems themselves also evolve. Needs
19 assessment, is one means of deciding how to allocate scarce resources to
20 prioritise and tackle need in the face of these complexities. A needs assessment
21 provides a basis for decision making, which will include local knowledge and
22 understanding of the nature of communities, their socio-demographics and
23 physical environment. Health needs assessment consists of a range of
24 techniques to assess and meet need in a rational and systematic way against
25 this background of complex and changing systems, population diversity,
26 evolution and increasing expectations and demand. An understanding of the
27 social environment and the social relationships within those environments is
28 essential to successful implementation of needs assessment.
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43 Later in this chapter we explore some of the difficulties attached to this approach.
44 However, it is very important to remember that applying rational principles in this
45 way arose from an understanding that the operation of an unmanaged system in
46 which historical patterns of supply, the generosity of benefactors, the preference
47 of medical practitioners to live in attractive areas, and their wish to provide
48 services that were consistent with *their* interests led to very unequal and
49 inefficient distribution of resources. So whatever the imperfections of the
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3 approach just described, it was born out of a desire to do things better and more
4 fairly.
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8 **Other techniques for doing needs assessment.**

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10 Other techniques may be and have been used to assess need. It has been
11 recommended in the US in the context of the Affordable Care Act that community
12 health assessments use such principles as: multisector collaborations that
13 support shared ownership of all phases of community health improvement,
14 including assessment, planning, investment, implementation, and evaluation;
15 proactive, broad, and diverse community engagement to improve results; a
16 definition of community that encompasses both a significant enough area to allow
17 for population-wide interventions and measurable results, and includes a
18 targeted focus to address disparities among subpopulations; maximum
19 transparency to improve community engagement and accountability; the use of
20 evidence-based interventions and encouragement of innovative practices with
21 thorough evaluation to inform a continuous improvement process; and, use of the
22 highest quality data pooled from, and shared among, diverse public and private
23 sources (Rosenbaum, 2013).
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36 A very wide range of methods have been pressed into service in the US. Becker
37 notes that “Research designs vary across states and agencies, and little is
38 known about the reliability or representativeness of results.” (Becker 2015:15).
39 Telephone and door to door surveys have been used to ascertain people’s self-
40 reported health needs (Stone, Sierocki et al 2018). Routine data and records
41 (Franz, Skinner et al 2017; Alfano-Sobsey, Ledford et al 2014), community health
42 partnerships and community surveys (Mathews, Coyle et al 2015), key informant
43 interviews, focus groups, mixed methods designs (Becker, 2015:15) and opinion
44 surveys (Alfano-Sobsey, Ledford et al 2014) have all been used.
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53 Community participation and community engagement are particularly
54 emphasised “community participation and mobilization in CHA processes
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3 includes the following: recognizing the community as a unit of identity; building on
4 strengths and resources; facilitating collaborative partnerships; emphasizing
5 locally relevant problems and an ecological perspective; promoting power
6 sharing, co-learning, and capacity building; improving cultural sensitivity,
7 reliability, and validity through quality community participation; increasing
8 community trust and ownership; developing community systems through a
9 cyclical and interactive process“ (Pennel, McLeroy et al 2015: 104). Pennel,
10 McLeroy et al (2015) note that the following should be included “gathering and
11 analysing quantitative and qualitative data; using data to identify health issues;
12 using broad social determinants of health to identify influences on health issues,
13 including environment, behaviour, socioeconomics, and culture; identifying
14 resources and resource gaps; identifying health disparities; engaging and
15 mobilizing the community; organizing and sharing findings; setting health
16 priorities; developing an action plan to address health priorities; implementing
17 action plans; and providing opportunities for continual feedback with community
18 members” (Pennel, McLeroy et al 2015: 103). But they also note that this broad
19 public health approach, may be at odds with the way that hospitals apply more
20 biomedical principles.
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36 In England, Joint Strategic Needs Assessment (JSNA) develops analysis and
37 strategy for current and future health and care needs of local populations to
38 inform and guide the planning and commissioning of health, wellbeing and social
39 care services within a local authority area. Health in All Policies (HiAP) aims to
40 identify interactions between strategic targets, policies and strategies and
41 population health and wellbeing (Public Health England and the Local
42 Government Association, 2016) utilising “Health Lens” assessment (Kickbusch,
43 Williams et al 2014). Health Lens Analysis has five essential elements that make
44 the most of opportunities to implement ‘Health for All’ actions for potential
45 population health impact and value. These are: -
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- 53 1. To engage in order to innovate and establish and maintain strong
54 collaborative relationships across sectors and disciplines.
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2. To determine agreed policy focus among stakeholders to achieve take-up, reach and delivery of programmes and services. To gather evidence and data: to establish insight on population health need in the policy areas of focus. The use insights and inference drawn from big, digital routine data sources within JSNA., is increasingly common.
3. To generate policy recommendations and a jointly owned final strategy report.
4. To navigate to help steer recommendations through the decision making process.
5. To evaluate to determine the effectiveness of the health lens

Health economics and needs assessment.

Over the last several decades, two important techniques have come into general use to assist the allocation of resources in the face of scarcity in health systems; health technology assessment which helps to assess effectiveness of interventions and cost utility analysis in health economics, to help assess cost effectiveness (Kelly, Morgan et al 2010). We have already discussed health technology assessment above in the context of assessments of effectiveness. We now turn our attention to the contribution of health economics.

As a starting point we look to Utilitarianism – which is the ethical basis of the discipline of economics. Utilitarian ideas, theories and techniques are concerned with the common good or the greatest happiness of the greatest number (Bentham, 1834). Utilitarianism in allocation of resources for the common good of society has much to commend it. But the tools and techniques do tend to favour the status quo. They do not challenge or on the whole try to amend existing resource allocations that might be considered to be unfair or unequal. Utilitarian tools and techniques if applied without critical reflection implicitly approve existing resource allocation and aim to improve social welfare starting from that point. They make what might be viewed as conservative changes to re-allocate

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3 resources, so that at least one person is made better off and nobody else worse
4 off (Pareto, 1935).
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8 Utilitarianism, or the greatest utility of the greatest number, is the ethic that
9 continues to guide economic thinking, tools and techniques and is also central to
10 the ethic of health needs assessment. However, at the end of the nineteenth
11 century, the future direction of economics as a discipline was influenced by the
12 introduction into mainstream economic theories of mathematical thinking from the
13 physical sciences and engineering.
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20 Economics moved away from broad questions of how resources should best be
21 applied for the good of society - a mix of value judgement on social welfare and
22 observation of facts, to empirical testing of hypotheses using data. For example,
23 economists became very interested in the relationship between unemployment
24 and inflation and used empirical testing of data to test hypotheses about these
25 variables.
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32 A new more scientific language and a range of tools and techniques emerged
33 from economic theories which tended to distance themselves from the messy
34 details of complex human behaviour. The legacy of these changes still survives
35 within economics. A quick perusal of the main economics journals today reveals
36 numerous articles containing strings of equations to test hypotheses, as well as
37 outlining the intricacies and new derivatives of different economic techniques and
38 tools and how to apply them rigorously. In addition, the need within the
39 economics discipline to find mathematical solutions to applied problems has
40 guaranteed survival of the basic assumptions of the economic way of thinking i.e.
41 people, firms and institutions are perfectly rational and behave predictably, as if,
42 they have perfect information and control over environment and events. In
43 economics, people are assumed to be equal and social/cultural and
44 environmental/place variations between them are not acknowledged explicitly. So
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3 when health needs assessment is viewed as rational, this is the underlying
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5 rationality.
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8 Health economics has developed particular techniques and tools, in particular the
9 Quality Adjusted Life Year (QALY) (Cohen and Henderson, 1988). This
10 technique is steeped in utilitarianism - allocating resources efficiently for the
11 common good - in this instance fair allocation of health technologies and other
12 interventions in the face of finite resources. Economic thinking is predicated on
13 the notion that most resources are scarce and have limits, but demand on those
14 resources is potentially infinite. This creates choice and opportunity cost meaning
15 that once resources have been allocated and used, they cannot be reallocated
16 and used again in another way (Powell, 2007). Health has been characterised as
17 a multidimensional, dynamic concept subject to changing human expectations
18 and revision over time (McGuire, Henderson et al 1988). The economics of
19 health has therefore also developed over time to reflect these changes. Since the
20 Second World War, successive generations of theorists have sought to embrace
21 new ideas about health. For example, economic, social and psychological
22 aspects of health have been included to reflect changing expectations, the nature
23 of health systems, stage of economic development and passing time (World
24 Health Organisation, 1947 1948; 1958). From the late 1980s in developed
25 countries, definitions of health broadened considerably to reflect the notion that
26 wellbeing is inseparable from and crucial to health, and in turn, both are
27 influenced by society as a whole (Bowling, 2001).
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46 Cost utility analysis and the QALY have been widely used around the world in the
47 assessment of the cost effectiveness of new drugs and of other types of clinical
48 interventions. But it has proved less well suited to assessing preventive public
49 health type interventions. The literature identifies a number of conceptual,
50 methodological and practical difficulties in evaluating the effectiveness and cost-
51 effectiveness of primary prevention interventions (Lorgelly, Lawson et al, 2010).
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3 There are difficulties of producing evidence of cost-effectiveness for public health
4 guidance and methodological difficulties associated with applying health
5 economic techniques to public health interventions (Kelly, McDaid et al, 2005).
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7 These difficulties and issues spring from the focus on efficiency within economic
8 evaluation techniques to the exclusion of the determinants of health and
9 inequalities in health, which are central preoccupations in public health
10 (Barendregt, 2006). This is important because as we will show, health needs
11 assessment is itself premised on principles of economic efficiency as well as the
12 principle of equity. And so the same problem that applies to the application of
13 simple cost utility analyses to preventive interventions also applies more broadly
14 to health needs assessment.
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24 **Equity, efficiency and health economics**

25 Health systems may be characterised by the way they organise, finance and
26 deliver resources to attempt to balance competing health and wellbeing
27 objectives. Equity in the distribution of resources is the main objective of a health
28 system where citizens have entitlement and equal access to the means of
29 achieving good health and wellbeing according to health need. Efficiency in the
30 allocation of resources- where the cost of good health and wellbeing is minimised
31 and the benefits maximised- is often prioritised by governments over equity in
32 order that the overall cost of a health system as a proportion of GDP, is
33 controlled. Efficiency and equity are generally viewed as competing objectives
34 that most health systems fail to reconcile because both objectives cannot be
35 optimised at the same time – creating an equity-efficiency trade-off. This in turn
36 raises concerns about social justice and generates philosophical arguments
37 about where the balance between efficient resource allocation and equitable
38 distribution of health resources to meet health need, should lie. Early forms of
39 health needs assessment and similar approaches - social audit and rapid
40 appraisal - attempted to establish the size of different health needs and to
41 prioritise and allocate resources pro rata on that basis.
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3 Health economic techniques and tools were directed at inefficiencies in the
4 allocation of healthcare resources and 'the need for healthcare' defined as
5 'capacity to benefit' from healthcare became recognised as a key aspect of
6 health status. As a consequence, the health intervention needed in any given
7 circumstance is a function of factors such as the level of prevailing resources, the
8 availability and effectiveness of health interventions, and the perspective and
9 values of those making the assessment. Over time notions of health need have
10 come to be defined as a result of momentum in economic discourse and debates
11 and the development and proliferation of common currency quality of life
12 measures that reflect the outcome and efficiency of interventions to improve
13 health and wellbeing.
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24 **Health systems and the equity-efficiency trade-off**

25 We next examine how economic conditions influence the inter-relationship
26 between equity, efficiency and cost describing debates about resource allocation
27 in Beveridge and Bismarckian health systems. These systems take their names
28 respectively from William Beveridge whose report was used as the basis for the
29 policies which helped establish the Welfare State in Britain in the 1940s (Ross,
30 1952) and Prince Otto Von Bismarck who set up the first schemes of national
31 insurance in Germany in the 1880s (Taylor, 1955; Thomson, 1957). We outline
32 the ways theories of justice underpin equity-efficiency trade-offs, explaining the
33 background to the emergence of new policy concepts and techniques of
34 assessing, measuring, evaluating and prioritising efficient and equitable
35 allocation of resources. The nature of the determinants of health and the role of
36 physical and social environment in the improvement of community health
37 outcomes are considered with respect to equity, need and efficiency.
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50 Healthcare is financed and provided free at the point of use by government
51 through taxation in Beveridge-type health systems. Beveridge health systems
52 differ from Bismarck-type systems in which healthcare is financed by multiple
53 employer-based insurance schemes and taxation in which providers are privately
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3 rather than publicly owned. Both types of system however face the same
4 problem of increasing demand in the face of finite resources to fund the systems.
5 In recent decades, some reformers of health systems and health policies have
6 attempted to create market incentives within the system to control overall
7 healthcare expenditure, increase quality, bring down prices and increase choice
8 (Bevan, Helderman et al 2010) - for example, providing a choice of provider for
9 healthcare treatments and services as a way of taking some people off waiting
10 lists. However, the economic and social trade-off is that this comes at a price -
11 leaving those who cannot afford to move to languish on the longer waiting list.
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20 Alternatively, other systems that prioritise access and give universal coverage to
21 meet health need provide a narrower range of healthcare services because price
22 signals to reallocate resources within the system are absent. An equity-efficiency
23 trade-off occurs and this can create a dash from central decision making to
24 localism where the allocation of resources is determined by local decision
25 makers. Much of the tension in the balance between efficiency and equity
26 however, can be traced to expectations and changes over time in the common
27 understanding of what constitutes good health and wellbeing in communities and
28 countries. Inevitably, these understandings are related to stage of economic
29 development, economic performance and historical Gross National Product
30 (GNP).
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41 **Some political and philosophical considerations.**

42 At the heart of the approaches to needs assessment outlined so far is a relatively
43 one dimensional idea of need. There is an altogether different approach in the
44 philosophical literature which defines need as a dynamic, politically and
45 ideologically value-laden idea. In the political and philosophical view, one focus is
46 *unmet* health needs in the form of morbidity in individuals and populations. It is
47 argued that unmet need creates unfair deficits in the distribution of health and
48 wellbeing among communities and populations - deficits that society should take
49 steps to address. In this view, need is described as something that is likely to be
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3 dynamic over time as technologies, expectations and availability of services
4 change. Measurement of need will therefore vary in different contexts, such as, in
5 the clinical setting and at the population level. Needs assessment planning would
6 therefore involve considerations of allocative efficiency along with social values
7 (McIntyre, Mooney et al 2009).
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13 Unfortunately, morbidity turns out not to be a good guide to unmet need! We
14 may posit that one person's need is greater than another's because there is a
15 greater degree of morbidity – they are sicker. This in turn implies that one health
16 state is more deserving than another because of the extent of the disease. It also
17 assumes we can accurately measure the differences in disease states. This
18 however may be a false premise because degrees of illness in a strictly biological
19 or pathological sense, even if they can be measured accurately and meaningfully
20 compared, tell us nothing about an individual's quality of life with different
21 degrees of morbidity and therefore their needs in a social or psychological sense.
22 Some people cope extremely well with illness and have a relatively good quality
23 of life while others seem to be rendered incapable of normal social functioning
24 with relatively minor ailments. The subjective experience of illness and an
25 individual's response to it significantly affects their expression of need. It is
26 difficult to measure need solely by assessing biological morbidity in any absolute
27 sense (Anderson and Bury 1988).
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41 There is a still more difficult issue relating to health differences in populations. All
42 health systems, and by definition all health needs assessment, have to confront
43 the systematic differences in the pattern of health in populations. The health of
44 individuals varies, and the health of groups of individuals also varies; so men and
45 women, age groups and ethnic groups show *average* differences in life
46 expectancy and patterns of disease. The health of one country varies compared
47 to other countries; within countries there are differences between individuals and
48 groups. These variations occur because of biological inheritance, because of
49 differential exposure to factors which cause disease and because health services
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3 are not uniformly or equally spread between individuals and populations. In any
4 case, individuals make widely different use of available services especially
5 preventive ones. Some people die relatively young, while others live to a ripe old
6 age. Some people live life with multiple health problems and disabilities, others
7 lead lives of a good quality and die peacefully in their beds in their nineties. So as
8 a starting point the demands placed on health systems of these different
9 individuals and groups vary. If we are trying in some way to meet the health
10 needs or demands of various individuals and populations on what basis should
11 we do it?
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20 The straightforward answer at the heart of most approaches to health needs
21 assessment is that we should seek to measure the needs of individuals or
22 populations and we should allocate provision to meet the need accordingly, as
23 that would be the fairest way to do it. But that in turn raises several questions –
24 how exactly would we measure need? Could we do so in a way that was
25 accurate and precise and more importantly could we do it in a way that was fair?
26 And fair exactly to whom? To the people in need or to the people who are not in
27 need and whom we might call upon to fund the needs of others in greater need
28 than them. But why should those not in need, subsidize those who are in need?
29 Is that fair? The answer as to whether one thinks it is fair will be dictated by a
30 political preference as well as general ideas about fairness which would in turn
31 be influenced by other ideas about ethics, morality, duty, responsibility and liberty
32 for example. Is it fair to have one's income taken away to fund the needs of
33 others? Not forgetting that some people's health needs are in part generated by
34 the choices that they themselves have made in how they have lived their lives,
35 whether they have chosen to smoke, to excessively consume alcohol and food
36 and to take drugs or engage in sexual practices which might expose them to risk
37 of infection. These people have health needs, but whose responsibility is it to
38 meet those needs? Again the answer will be influenced by other value positions.
39 It must also be acknowledged that in response to the international financial crisis
40 of 2008 austerity policies have been pursued in many countries. Consequently,
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3 the recent economic environmental context is less likely to trigger positive
4 change in population health impact and value through strategic needs
5 assessment. In response to austerity in England, Local Authorities have
6 developed Sustainability and Transformation Plans (STPs) alongside Joint
7 Strategic Needs Assessment. These aim to move resources from acute care to
8 prevention by targeting those most in need.
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15 **Patterning of health differences**

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17 There is another very important dimension at play here which, we have not so far
18 explored in detail; this is the *patterning* of health differences. This removes the
19 discussion from the level of the individual to the level of the social or population.
20 The differences in health experience and health outcomes, the differences in
21 access to services, the differences in exposures to risk and the differences in
22 activities which are health damaging are not distributed randomly or evenly in the
23 population. Health experience and health outcomes are strongly patterned by
24 social position. On whatever measure used to assess health be it mortality,
25 morbidity or self-defined health, the measures follow a social gradient. Those
26 who are better off *on average* enjoy better health, live longer and make more use
27 of available services. This applies under whatever arrangements for the funding
28 of services operate.
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38 It holds true in market systems like the United States, it holds true in social
39 insurance systems as found in much of Western Europe and it holds true in
40 societies where care is free at the point of use like the United Kingdom. This is
41 called the health gradient - and is one of the most enduring and vexatious
42 characteristics of contemporary health systems (Graham and Kelly, 2004).
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48 Comparative data for the UK and the USA illustrate the gradient. They show
49 similar patterns of graded health differences measured by income for, among
50 other things, self-assessed health, diabetes, heart disease, and lung disease
51 (Banks, Marmot et al 2006). The gradient is described in many texts, reports and
52 papers (Bleich, Jarlenski et al 2012). The shape of the gradient varies; it tends to
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3 be steeper in societies with very heterogeneous populations and rather gentler in
4 societies which are more socially homogeneous; but only by degree. Health
5 differences linked to social position remain an enduring and structural feature of
6 contemporary developed societies. In both developing and low income countries
7 the same features of health inequities apply though the shape of the gradient
8 tends to be more curvilinear. In some developing and low income countries a
9 small affluent elite enjoy good health outcomes and the majority of the population
10 are in a less desirable situation (Bonney, Morgan et al 2007).
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19 In broad terms the state of the contemporary world is one where health
20 differences, however measured, prevail across all societies and also between
21 societies. There are absolute health differences between rich and poor societies
22 and between rich and poor people and those not so poor, in all societies (Kelly
23 and Doohan, 2012). So here we encounter a major problem with the apparently
24 rational calculus of health needs assessment. Whether health need is expressed
25 in terms of health status or outcome, need (including subjective expression of
26 need) varies systematically across the population and there are considerable
27 health inequalities. It can be, and often is argued that the needs of the most or
28 the relatively disadvantaged are paramount and therefore resources should be
29 deployed in such a way that they meet those needs first. All that would remain to
30 be done would be to find a technical solution to the measurement of need.
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41 In addition to the health gradient there are two other ways of looking at health
42 differences called health disadvantage and health gaps (Graham and Kelly
43 2004). Health disadvantage simply focuses on differences, acknowledging that
44 there are differences between individuals, distinct segments of the population, or
45 between societies. It is a descriptive and non-judgmental approach. The health
46 gaps approach, in contrast, focuses on the differences between the worst off and
47 everybody else, often inviting the conclusion that those who are not the worst off
48 enjoy uniformly good health. The gap approach also invites the conclusion that
49 this state of affairs is wrong or unfair.
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5 A gap approach and a gradient approach lead to rather different solutions.
6 Conceptually, narrowing health gaps look to actions which will improve the health
7 of the poorest regardless of the rest of society. Such an approach would be one
8 which achieved both an absolute and a relative improvement in the health of the
9 poorest groups. The health gradient approach takes, as its starting point in
10 contrast, the acknowledgement that the penalties of inequities in health affect the
11 whole social hierarchy even though they increase from the top to the bottom.
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19 Gaps and gradient approaches lead to quite different assessment of need and
20 how to meet those needs. It may seem counter intuitive, but if policies or actions
21 only attempt to target the needs of people at the bottom of the social hierarchy,
22 there will be little or no impact on health inequalities across the rest of society
23 (Rose, 1984; 1992). This is because inequities in health will still exist, the social
24 determinants continue to exert their malign influence and the health needs of the
25 majority of the population remain unattended to. The alternative approach
26 advocated by the Marmot reviews for example and WHO (Bonney, Morgan et
27 al 2007) involves a consideration of the whole gradient in health inequities rather
28 than only focusing on the health of the most disadvantaged. An effective policy in
29 this regard is one that meets two criteria. It is associated with (a) improvements
30 in health (or a positive change in its underlying determinants) for all
31 socioeconomic groups up to the highest, and (b) a rate of improvement which
32 increases at each step down the socioeconomic ladder. In other words, a
33 differential rate of improvement is required: greatest for the poorest groups, with
34 the rate of gain progressively decreasing for higher socioeconomic groups. It
35 locates the causes of health inequity, not in the disadvantaged circumstances
36 and health-damaging behaviours of the poorest groups, but in the systematic
37 differences in life chances, living standards and lifestyles associated with
38 people's unequal positions in the socioeconomic hierarchy (Graham,
39 2004a,2004b; 2006). The significant caveat is that where the health gap is both
40 large and the population numbers in the extreme circumstances are high, a
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3 process of prioritizing action by beginning with the most disadvantaged would be
4 the immediate concern.
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8 **From health inequality to health equity**

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10 The gradient leads to some other questions. Does it matter that there are
11 patterns of inequalities in health? Why should we seek to remedy this state of
12 affairs? Why use the instruments of health service provision to deal with this
13 problem? Why conduct needs assessment to try to change the gradient? After
14 all, all societies demonstrate a gradient to some extent. Even though health
15 differences are clear, a case may be made that over the last century and a half,
16 things have improved for nearly everyone - at least in the developed West. Rates
17 of infant mortality are at an historic low and life expectancy has never been
18 greater. Furthermore, while *average* patterns of morbidity and mortality in
19 different social groups and populations may be clear, there are wide variations
20 between individuals. In short, not all well to do people live to a healthy ripe old
21 age, and not everyone who is disadvantaged dies young. To be human is to
22 know that we will eventually die and that the manner and timing of our death is in
23 almost all circumstances beyond our control whether we are rich or poor. So is it
24 the case that patterned average differences in *early* and largely *preventable*
25 death and suffering are unfair and unjust just because they are theoretically
26 preventable – particularly when there is no necessary inevitability that relatively
27 disadvantaged people should die earlier than anyone else? There is no
28 straightforward answer.
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44 A number of writers have explored the theme of injustice in this context. The
45 World Health Organisation (WHO) has had a long-standing interest in the matter.
46 The World Health Organisation's Commission on the Social Determinants of
47 Health used a series of definitions to clarify things which were based on the work
48 of Whitehead (Whitehead, 1992; Whitehead and Dahlgren 2006) and Solar and
49 Irwin (Solar and 2010). A distinction is made between health inequality and
50 health inequity. Health inequality is defined as *health differences which are not*
51 *avoidable or preventable, are not the consequence of human actions and*
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3 *activities, but are based on genetic or constitutional individual differences, age or*
4 *biological sex.* These are sometimes also referred to as variations (Kelly, Morgan
5 et al 2007). Health inequity, in contrast, is defined as *unfair and avoidable or*
6 *remediable differences.* Health equity in turn is defined as *the absence of unfair*
7 *and avoidable or remediable differences in health among social groups* (Solar
8 and Irwin, 2010). The italics highlight the difference in definitions. It is particularly
9 important to note that the difference in definition between inequity and inequality
10 is not used universally and many writers and commentators employ the two
11 terms as synonyms. Also the distinctions between individual differences which
12 are based on human biology and differences arising from interaction between an
13 organism and an external man-made hazard are in reality difficult to draw in
14 anything other than an analytic sense. Empirically the divides are much fuzzier
15 than these definitions suggest. However, as a way of beginning to find some
16 clarity the distinction is helpful. Equity and inequity are not products of nature
17 they are the products of human actions and, as they are socially, economically
18 and/or politically produced they are, theoretically at least, modifiable. The
19 defining characteristics of equity are fairness and justice; the defining
20 characteristics of inequity are unfairness and injustice (Whitehead and Dahlgren,
21 2006)

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Fairness and unfairness can be conceptualised as absolutes; something or some state of affairs is either fair or unfair – it cannot be both at the same time. But thinking like this in absolute terms misses the point that fairness and unfairness are not properties, things or states of affairs, but are about *relationships* between people. Fairness and unfairness arise as a consequence of the nature of the *relationships* between people and the ebb and flow of human affairs. So too justice is not a simple measure of equitable distribution of resources according to need, but is about the nature of relationships in society.

Justice may be understood in terms of the properties of people, their conduct, the rules that govern their affairs and the characteristics of institutions - an absolute

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3 definition The alternative is a *relational* concept of justice which concerns itself
4 with the 'justness' of relations between people - X is unjust to Y (Pogge, 2010).
5 Such relations involve human agency, purpose and motive. From a relational
6 point of view justice should not be about fair distribution; it should be about
7 seeking to identify the agents responsible for the social arrangements that
8 determine the shape of human relationships (Pogge, 2010).
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15 Health equity may be conceptualised in distributional or relational terms in the
16 same way that justice can be. The distributional approach is focussed on the goal
17 of equalising good health across society – which is really the underlying value
18 position of most health needs assessment and much of the discourse about
19 health inequity. The relational view is about the balance between the harms
20 inflicted and harms mitigated or prevented. In the relational view social
21 institutions and those responsible for them should have more concern to prevent
22 and mitigate those things they cause themselves and for which they are
23 responsible, rather than those things which are outside of their control (Pogge,
24 2010). So the real issue in relational terms, with which equity should be
25 concerned, is not the fact that health is differentially distributed, but that social
26 systems contribute to the differential distribution of health and disease. Poverty is
27 the greatest contributor of all to ill health. Organising economic arrangements so
28 that they do not generate the conditions of poverty which generate ill health is
29 thus, it may be argued, a moral duty. Therefore, focussing on assessing need
30 without looking at the wider determinants of the causes of inequity in the first
31 place, is misguided. The global economic order is responsible for the generation
32 of ill health and health inequities (Pogge, 2010), and the social arrangements that
33 have negative effects on health are unjust (Venkatapuram, 2011).
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50 In a celebrated paper called '*What is the point of equality?*' Anderson outlined a
51 number of the problems associated with the distributional concept of equality.
52 She warns against the notion that we can construct institutions to make them
53 more equal and fair, not least because this tends towards greater and greater
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3 state interference in the lives of the citizenry. She notes that one of the dangers
4 associated with egalitarianism and the distributional approach is that it pushes
5 the limits of the state further into the lives of ordinary people. This is a particular
6 danger if states become concerned with equities of health rather than
7 oppressions of the powerful against the powerless. In other words, focusing on
8 rearranging health care resources to make the patterning of health more
9 equitable is rather like moving deck chairs around on the deck of the Titanic after
10 she hit the iceberg - largely irrelevant and pointless when the ship is sinking.
11 “Recent egalitarian writing has become dominated by the view that the
12 fundamental aim of equality is to compensate people for undeserved bad luck –
13 being born with poor native endowments, bad parents and disagreeable
14 personalities, [and] suffering from accidents and illnesses” (Anderson, 1999).
15 This she says is not really the issue. We should instead be preoccupied with
16 ending oppressive social relations rather than trying to ensure that everyone gets
17 what they morally deserve. It is about creating a community in which people have
18 equality in relationships with one another (Anderson, 1999) – a community built
19 on cooperation between members who see themselves as equals. She argues
20 for democratic equality which means that all law abiding citizens are allowed
21 effective access to the social conditions of their freedom. Anderson criticizes the
22 view that the purpose of distributive justice is to compensate people for their
23 misfortune. Her argument strikes at the heart of the idea that health inequities are
24 simply unfair; her position is that while life may be unfair, bad luck is not at the
25 heart of it – it is the relations between people and the way that they treat each
26 other that is much more fundamental.
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46 Anderson draws our attention to the fact that concept of equality can mean a
47 number of different things depending on the underlying political value position
48 and the epistemological assumptions of the theory. So a utilitarian seeking to
49 maximise the greatest happiness of the greatest number would see things
50 differently to a Marxist seeking absolute parity in access to wealth for example.
51 She demonstrates that equality is a rationalist rather than an empiricist concept,
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3 meaning that the discourse about distributional equality and health equity is
4 premised on the manipulation of ideas and the contest between different ideas
5 and political philosophies, rather than being something that can be demonstrated
6 by empirical methods (Millican, 2007). True, protagonists will appeal to empirical
7 evidence about poverty and about wealth to justify their arguments, but in the
8 end, much of the discussion about equality is grounded in ideal discussions of
9 future desired states and institutions and the manipulation of ideas to justify that
10 view, rather than the case being made that empirically things could be changed
11 by doing x, y or z. Where x, y or z are suggested, they are selected on the basis
12 of ideological preference, not empirical science.
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22 Bernard Williams argued that the proper grounds for the distribution of health
23 care are health need (Williams, 1962). This he saw as a fundamental truth (Wolff,
24 2007). Others have argued that this is not a fundamental truth at all. Nozick has
25 suggested that the focus on need, common among egalitarian thinkers, is to
26 define people quintessentially as consumers. The task then becomes one of
27 finding the best way to ensure the fair distribution of available goods to
28 consumers (Nozick, 1974). The problem of course with this approach, is that this
29 casts humanity into a fundamentally passive role and it doesn't consider
30 individuals as active producers (Wolff, 2007). Williams also argued that there is
31 nothing about need itself intrinsically that should motivate action on equity
32 (Williams, 1962). What society decides to do for people, particularly in health
33 need, depends upon a moral and ethical stance.
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45 Another argument is that the goal of fair distribution should be treating the worst
46 off as well as possible rather than flat equity (Wolff, 2007). John Rawls argued
47 that difference in the distribution of primary goods such as health is tolerable, so
48 long as the welfare of the most disadvantaged is looked after (Rawls, 1971).
49 Dworkin takes this argument a stage further. He suggests that we need to
50 determine why the worst off are in that position. Dworkin asserts that some may
51 not be able to work because they are unable to find work; but others may decide
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3 they do not want to work. Dworkin also notes that some people's needs are
4 greater than others (someone who is severely disabled has greater need than
5 someone who is able bodied for example – although as we noted above this is a
6 highly questionable first premise). But needs, Dworkin notes, are compounded by
7 taste. Some people's needs are determined by expensive tastes say for drugs or
8 wine or jewellery. Dworkin therefore distinguishes between brute bad luck and
9 circumstance from optional bad luck involving some degree of culpability for
10 being in need. For Dworkin, this distinction is all important, as it is his view that
11 the state has a duty to deal with the former, but not the latter (Dworkin, 2000).
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20 **Some further philosophical reflections**

21 Health needs assessment is not value neutral it is premised on a number of
22 philosophical and political concepts. It is helpful to explore the arguments relating
23 to these ideas not least because although they are fundamental to health needs
24 assessment the conventional literature about health needs assessment seldom
25 considers the underlying assumptions and issues in detail. This is particularly so
26 with respect to the central importance of utilitarianism and its contested place in
27 the philosophical canon. The discussion is made all the more confusing because
28 many of the relevant ideas like justice, equality, fairness and so on are in
29 common as well as technical philosophical usage and the meanings attached to
30 common sense understanding of the words and the technical vocabulary usage
31 are seldom commensurate.
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43 Another very intriguing characteristic of the literature – a literature after all which
44 readily uses terms like justice, fairness, equality, is that with the exception of Sen
45 (2009), (more of whom below) the origins of the arguments about justice and
46 need are conducted almost entirely without reference to their antecedents in
47 Christian or the teachings of the other major world religions. The secular
48 attempts to define the equal society, justice and fairness struggle in this regard,
49 to find a moral or ethical point of reference. The other very odd thing is that
50 conventional political philosophy has, down the years, actually paid scant
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3 attention to health and health inequalities and issues of distribution of health care
4 resources (Venkatapuram, 2011).
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8 At the heart of the debates about equity and health inequity in contemporary
9 society is, as we saw above, social justice. Health inequities are considered by
10 many commentators to be unjust and unfair and this is advanced as a reason for
11 allocating resources following needs assessment, more fairly. Just as
12 utilitarianism is central to health needs assessment, it has also been central to
13 theories of justice too viz. what produced the greatest happiness in the greatest
14 number was considered to be socially just (Venkatapuram and Marmot, 2009).
15 This absolute or distributional approach to justice was based on a highly
16 individualistic model and was premised in turn on the individual as the unit of
17 analysis and not the alternative which is the relational conception of social life.
18 The solution in the utilitarian view of the world is fair distribution and systems
19 which can efficiently distribute resources, a principle at the very heart of health
20 needs assessment. The utilitarian argument overlooks, by virtue of its basis in
21 the maximisation of utility, not only the fact that humans are motivated by a
22 variety of things, not just maximising utility, like love, social conflict, human
23 venality, and sheer and utter evil, but also it doesn't seem have a concept of the
24 social (Etzioni, 1988). In other words, individual utility maximising motivated
25 agents are the focus of the argument, not social relations between people. This
26 individualistic approach chimes with medicine.
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43 Medicine has as its principal focus, pathology in the individual human body. This
44 means that, with only a few historical exceptions, the intellectual interests have
45 been oriented to phenomena located in individual human bodies or minds with
46 pathology measurable in ways that reflect the individual and individual variation
47 from some notion of what is normal or healthy (Antonovsky, 1985;1987; Carter,
48 2003). This approach received an enormous boost with the rise of germ theory
49 and with the fantastic successes of the isolation of pathogenic microbes and then
50 antibiotics to combat them (Kelly & Russo, 2018). Of course medicine has other
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3 foci too; especially body systems, but the variables and phenomena of particular
4 interests are individual. The pathogenic paradigm, in which the fundamental
5 rationale is isolating the specific cause (pathogens) of specific outcomes
6 (pathologies), reinforces the individualistic approach (Antonovsky, 1987).
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8 Psychology has likewise made its main focus the individual so measures of
9 intelligence, personality, quality of life, all reside in the individual or are
10 characteristics or properties of individuals. The approach is about the degree to
11 which things go wrong in individual bodies and minds and the preceding causes
12 of the pathology. Need as an individual property is an obvious next step in this
13 way of thinking.
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23 Economics and especially health economics has bought into this individualistic
24 paradigm in a big way. The QALY and the application of cost utility analysis and
25 health technology assessment are deeply infused with an individualistic
26 orientation. The greatest happiness of the greatest number is the utilitarian
27 philosophical view which sits very comfortably with the individualistic paradigm
28 because it conceptualises the notion of the good as the aggregate of lots of
29 different individual utilities. The ontological consequence of this – i.e. the
30 assumptions made about what constitutes human life and how and why it is the
31 way that it is – is the idea that the essence and meaning of human existence can
32 be captured by isolating these individual characteristics and seeing how they
33 connect to each other. So individual characteristics as different as height, weight,
34 blood pressure, bone density, hair colour, IQ, biological sex and size of tumour
35 for example can each in turn be linked to the presence of other characteristics in
36 the individual like health of mother, poor nutritional status in childhood, genetic
37 coding, parental heredity, age, chromosome structure and exposure to tobacco
38 smoke. The causal link is from one individual characteristic to another.
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51 Now all of this is intuitively meaningful – in the modern Western world the
52 individual and the individuated self are touchstones of the way we live our lives
53 and the way the state regulates our lives - we have for example individual
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3 national insurance numbers, passport numbers, birth certificates, tax codes and
4 genomic structures. Individual variables seem natural. Further in medical terms
5 there have been some remarkable successes in isolating disease mechanisms
6 and offering curative technologies using the individual approach– although far
7 less than the popular imagination often supposes - using these principles.
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12 However, there are two fundamental objections which suggest that an additional
13 way of viewing things might be helpful. First the individualist approaches
14 dehumanise people – people are reduced to some sub-human characteristic – a
15 number, a genetic code, a pathological organism, a utility. But second, and more
16 importantly, and notwithstanding the advances that have followed in the wake of
17 some of the individualistic connections which have been made, above all it
18 ignores or relegates the fact that humans live in groups and that those groups
19 are in relations with each other and that membership of those groups is a
20 defining characteristic of identity and of profound importance to most people –
21 one’s family, class, tribe, caste, gender, ethnicity, nationality are all paramount
22 social markers in life. Moreover, the relationships within which we live our lives,
23 the relations with other people, the relationships within and between different
24 groups, shapes the nature of our human selves, our experiences and our
25 behaviour (Kriznik et al 2018). The defining characteristic of human life is
26 belonging - to be a member of multiple groups and communities. We live our
27 lives in a network of interlinked and overlapping relations with others. Knowingly
28 or not, the desire to belong has far reaching consequences on the types of
29 behaviours that we adopt and the choices that we make. Not surprisingly
30 therefore, the effects of social exclusion or isolation from social groups are of
31 paramount importance when trying to explain the health of an individual.
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48 What this makes us pause and reflect on is not that the individual understanding
49 of human affairs is unimportant – that would clearly be an absurd position to
50 adopt. Rather it is that a full understanding of the human condition requires
51 additionally another set of concepts – which capture human relationships –
52 relational concepts – in order to develop a rounded account of human life (Kriznik
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3 et al 2018). And moreover inequity and injustice are best understood in relational
4 not individualistic terms.
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7 Social theorists have grasped the idea of a well-rounded approach very neatly in
8 the conception of the dynamic interaction between agency and structure. The
9 idea of agency is that we are all unique biological, psychological and physical
10 individuals. We all engage in individually motivated actions and behaviours which
11 are in part the results of our unique individuality. But the sum of all human
12 behaviours is the social structure which is the product of the millions and billions
13 of human relationships that are the medium for individual actions. Those
14 structures or webs of human relationships are relational and in turn they
15 constrain, drive, and facilitate individual human behaviour. So we have individual
16 behaviour, the medium for its expression which are human relationships, and
17 social structures which are the sum of all those relationships which in turn
18 impinge on and delimit the possibilities of individual behaviour (Giddens,
19 1979;1984; Elder Vass, 2010)
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31 This rather abstract approach allows us in turn to consider some of the thorny
32 problems at the heart of health needs assessment. Thinking of the dynamic
33 interaction between agency and structure moves us beyond the methodological
34 individualism of traditional epidemiology and therefore of health needs
35 assessment and provides an escape from the individual level of explanation
36 (Frohlich, Corin et al 2001). This in turn allows for a fuller understanding of the
37 dynamics of the development of health inequalities. (Abel and Frohlich, 2012),
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44 This way of thinking has been linked to what is called capability theory (Sen,
45 2009). Under austerity policies the notion of capabilities has started to enter into
46 Joint Strategic Needs Assessment, Health in All Policies (see section above on
47 some political and philosophical reflections above). The core characteristic of
48 capability theory is its focus on what people are effectively able to do within
49 relationships with each other (Abel and Frohlich, 2012). Individuals being able to
50 engage effectively in what they really want to do, is the core idea. These
51 engagements include being active, healthy, and being able to work but the list is
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3 not limited to these activities. In the capability approach, resources and their fair
4 distribution to individuals (the focus of the traditional utilitarian approach) are not
5 the central interest. Resources are not ends in themselves they are means to
6 ends. And neither are resources reducible to monetary utilities. People's abilities
7 to realize their life goals and plans are the focal point. In the capability approach,
8 the issue of justice, fairness and need does not apply to resources *per se* but to
9 the range of options for agency – the capabilities (Abel and Frohlich, 2012).
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16 Sen is a key thinker in relation to these arguments. He makes the case for a
17 dynamic approach to social justice. He has argued that to think about justice like
18 this is a major shift away from the traditional ways that philosophers have thought
19 about justice. This is because they were locked into the utilitarian/ distributional
20 tradition (Sen, 2009). This is important in the context of needs assessment which
21 is fundamentally utilitarian and implies that through its rationality and market
22 allocative efficiency it will be possible to deliver fairness by market redistribution.
23 This follows a tradition which goes back, according to Sen, to the Enlightenment.
24 The utilitarian position is a rationalist position writ large, i.e. a position which is
25 about the manipulation of ideas, rather than the observation of empirical facts
26 (Millican, 2007). The ideas about social justice which are being manipulated are
27 that it is possible to design institutional arrangements that will deliver justice and
28 this will be the basis of a perfect society. For Sen, justice is a relative concept
29 and is about relations between people. Justice is a process, an aspiration; it is
30 about advancing justice or reducing injustice. It is not about finding or describing
31 the perfectly just society. Because social structures and their properties emerge
32 out of human relationships, it means that to try to legislate to change social
33 systems to make them more just or fair can only ever be partially effective. In a
34 sociological sense justice and injustice are properties of social systems not
35 abstract transcendental things that can be made by social actors. Sen's
36 approach is comparative, plural, iterative, dynamic, and acknowledging of
37 alternatives.
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3 Justice in this view is not a given – a rationally derived static universal principle. It
4 is about relations between people and arises as a consequence of social action
5 and social structure. Therefore, injustice will also arise socially in social
6 interaction and is decided upon morally or metaphysically. The judgement about
7 whether the relations between people, such as differences in health, are just or
8 unjust is a value judgement. In short, seeking to bring about equality in relation to
9 health by the utilitarian redistribution of resources is never likely to work, or to
10 produce fairness and justice because justice is not a quality of individuals or
11 institutions. Equality is about human relationships and the utilitarian approach at
12 the heart of health needs assessment is based on an alternative individualistic
13 ontology.
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24 Sen's argument is that theories of justice major on something; it could be
25 happiness as in the case of classical utilitarianism, and it could be resources or
26 income. Sen argues that in contrast to these utility-based or resource-based lines
27 of thinking, individual advantage is judged in the capability approach by a
28 person's capability to do things they have a reason to value. A person's
29 advantage in terms of opportunities is judged to be lower than that of another if
30 they have less capability – less real opportunity – to achieve those things that
31 they have reason to value. The focus is on the freedom that a person actually
32 has to do this or be that – things that they value doing or being (Sen, 2009).
33 Sen's approach is about human life and the opportunities for living - living as
34 against just existing. Justice for Sen cannot be created by social institutions.
35 Justice should aim to reduce injustice, i.e. change the nature of the relationships
36 between people, rather than aiming to produce a perfectly just society.
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48 **Conclusion.**

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50 Health needs assessment can be seen as a highly rational and straightforward
51 means of identifying health needs, of linking needs to patterns of health
52 inequities, of marshalling appropriate resources to match those needs and then
53 deploying resources accordingly. And of course that is what it aspires to do. But
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3 that aspiration is based on the traditional rationalist approach of utilitarianism and
4 in turn on an individualist ontology. Need, as we have shown, is not a static,
5 objective thing. It is therefore intrinsically difficult to measure and as soon as one
6 starts to try to capture the idea fundamental questions about fairness and justice
7 are raised.
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12 The objective and measurable concept of need is located in an individualist
13 ontology. When we think instead in relational terms about equity, justice and
14 human capabilities a different perspective is possible. Capabilities theory
15 captures the idea of equity in a far more nuanced way than individualistic
16 utilitarian accounts. It also offers a more complete way of understanding how we
17 might rethink health needs assessment.
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24 So rather than seeking to measure individualistic objective variables and then
25 seeking to apply resources accordingly, the relational capabilities approach bids
26 us to think about the relations between service providers and users in a novel
27 way. It requires us to not to try to match resources to a completely slippery and
28 spuriously objective concept of need, but instead makes us consider the nature
29 of the relationships between people and services.
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35 Maximising health outcomes, a utilitarian fundamental principle, may not be what
36 social justice requires and alleviating injustice may require more than maximising
37 efficiency (Venkatapuram, 2011). The argument then hinges on several
38 fundamental things: the degree to which the structure and organisation of
39 services permits people to meet their own capabilities, the degree to which it
40 allows human potentials to be realised, the degree to which the relationships with
41 services do not distort or alienate people from themselves or from others. The
42 capability approach privileges human functioning, not maximising utility or
43 achieving an idealised and biologically improbable disease free state
44 (Venkatapuram, 2011).
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53 This means that service design should reflect and respect human dignity; this
54 means respect for an individual person, but at the same time acknowledging the
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3 limitations which disease and disability genuinely impose on people while
4 recognising that there is not a direct cause and effect linear relationship between
5 disease state and social functioning. It should acknowledge the fact that illness
6 and disease by their very nature tend to exacerbate disconnectedness between
7 the person and their normal role responsibilities, their primary social attachments
8 and their desired capabilities. The experience of disease and disability can also
9 produce a profound separation of the individual from their sense of self or their
10 sense of who and what they want to be. The capability approach therefore
11 requires us to respect the lifeworlds of ordinary people and work with them to
12 build their skills, assets and capabilities (rather than focussing on their deficits
13 and trying to correct them via resource redistribution). These skills, assets and
14 capabilities allow them to manage their lifeworlds with minimal interference. The
15 kinds of skills which enhance capabilities include interpersonal relationships,
16 technical skills to manage the routine aspects of social and economic and
17 domestic life, skills to develop emotional and psychological resistance (often
18 referred to as coping or resilience mechanisms) and an ability to make life seem
19 meaningful. These skills enable people to manage the routine travails of ordinary
20 living as well as the more significant life events which engulf everybody from time
21 to time (Kelly, 2010b). It also allows people to manage the material lifeworld they
22 inhabit. This is important because the material and psychological lifeworlds
23 mediate the stressors - physical, psychological and biological - which assault the
24 human body periodically. The greater the ability people have to control their life-
25 worlds, the greater the resilience they will have. Skills to control the life-world are
26 quintessentially capabilities. The inability to exert that control forms the basis of
27 the patterning of health inequities because the ability to exert control is not
28 spread uniformly through the population. Following Sen's prescription, we should
29 seek not to measure need in a potentially spuriously scientific way, but rather
30 acknowledge that the *total* population, all of us, are in need of strengthening our
31 capabilities. Further it is relatively easy to predict where the need to develop
32 more capabilities and skills is greatest and that is among the poor, the
33 disadvantaged, sub-groups and minorities, and people with disabilities. Efforts to
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3 develop and build the skills and capabilities should be proportionately, but not
4 exclusively, focussed on these groups. The level of self-empowerment to help to
5 realise these capabilities needs to be appropriate for the individual. This is an
6 important consideration when deciding where to deploy resources. When this
7 happens, it almost always involves active public participation to determine what it
8 is that people value.
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15 Moreover, upstream efforts need embrace a public health preventive approach;
16 an education in basic skills for living, appropriate role modelling as the basis of
17 skills for human interaction, proper deportment, manners, respect for others,
18 management of emotions and the development of a balanced sense of self and
19 identity – are the basics of human socialization. This means that the early years
20 are particularly important and that taking the edge off encounters between people
21 that are destructive and harmful is paramount.
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29 While all of this plays out on life's grand stage, it must also apply to the way
30 health services are provided and delivered. If services are organised around
31 allocative efficiency alone and neglect the sense of self, the identity, the skills
32 required to negotiate the system, and they alienate patients and public from and
33 systematically deskill the recipients of care, they meet no one's needs at all, and
34 serve only to make the patterns of inequities worse. They become, in other
35 words, a contributor to the problem, rather than a solution to it. Unfortunately, the
36 utilitarian approach with its individualistic ontology, and its emphasis on ideal
37 rationality, is focused on a question, which on the face of it is not unreasonable,
38 of how to match resource deployment to need. This is in fact the wrong question,
39 so it often ends up doing exactly the opposite of what it is trying to do and making
40 matters worse. A purely deficits approach to health needs assessment may well
41 be neat and tidy, however it only tells one side of the story. Widening the
42 approach to encompass assets starts to get complex and messy. Where Sen's
43 capability theory is involved there is no ready-to-go formula. Instead of avoiding
44 what is hard to do we should embrace the challenge. It is after all, the challenge
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3 of understanding what it is to be human. Fortunately, there are many people who
4 have risen to this challenge and remarkable things are happening across the
5 Globe. Whilst helping people in need is a virtue we mustn't lose sight of the fact
6 that we are all part of the human species and we all live on the same planet.
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8 None of us are equal until all of us are equal.
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13 We should understand needs assessment in terms of building assets and
14 capabilities rather than focusing on deficits. In the context of the aftermath of the
15 global financial crisis, austerity, the ageing population, rising levels of obesity and
16 costly healthcare systems there are clear implications for the nature of health
17 needs assessment. What is required is greater capacity to harness insight from
18 routine digital data, more acceptance of ideas about creating agency among
19 those most in need and acknowledging the impact of the structural determinants
20 of health on capability. Population approaches, targeting those in greatest need
21 allow the harder edge of human existence to be ameliorated.
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31 It does mean though that the temptation to try to find purely rationalist solutions
32 which can only ever work in theory, or indeed in Utopia – nowhere - rather like
33 transcendent theories of justice, must be resisted. It must be acknowledged that
34 it is about human relationships and allowing those relationships to be as humanly
35 meaningful and fulfilling and permitting of enhancing human capabilities as
36 possible. The most important task in a good and just society is to prevent the
37 erosion of those things which protect and maintain human capabilities. It is to
38 protect the virtuous and the virtues and to enhance them where possible and to
39 protect them by supporting social arrangements which facilitate that.
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46 Relationships cannot be legislated for, nor made to happen by complex
47 processes of resource allocation. Justice and the social arrangements that
48 maintain relationships are in the end the emergent properties of social relations.
49 Those relations must be cultivated in a humane, and as far as possible, just way
50 that protects and enhances people's capabilities. This must be the pre-requisite
51 for any state wanting to deploy its health care resources in a way that is both
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3 effective and meaningful. Building capability into service design is a fundamental
4 pre-requisite.
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