



## **Social Protection Investment in Long-Term Care**

HORIZON 2020 Grant Agreement No 649565

### **Deliverable 2 in Working Package 2**

**(3<sup>rd</sup> draft)**

### ***Applying social investment principles to the provision of long-term care: issues for consideration***

***Bernard H Casey, PSSRU, London School of Economics***

Thanks for comments and discussions on earlier versions of this paper are due to Con Keating, Peter Morris, Platon Tinios and Fritz von Nordheim. All interpretations are those of the author.

**b.casey1@lse.ac.uk**

**December, 2015**

## **Applying social investment principles to the provision of long-term care: issues for consideration**

This paper has been produced to address the question of what is understood by social investment (SI) and how the social investment discussion can be understood better by those involved in planning and delivering care services. It is intended for partners in the SPRINT project and also for circulation amongst stakeholders.

Under WP2, SPRINT is committed to:

- a) defining the concepts and terms upon which the project as a whole will operate;
- b) providing an understanding of what SI, itself, means – this requiring the many dimensions of the term to be unpacked and the extent to which there is a common understanding of what SI is currently achieving, and what might be achieved, to be made clear;
- c) setting the background for an examination of how social cost-benefit analysis might be applied to answer the question: *Are there any commonly accepted metrics to reasonably, comprehensively and effectively compare “expenditure” on long-term care services with respect to their quality and social performance?;*
- d) enhancing the discussion about how the principles of SI are or might be used to improve LTC provision in a fashion that is welfare enhancing; and
- e) establishing a common vocabulary for social investing, permitting the definition of key terms and concepts and producing a glossary that will facilitate efficient communication by giving an explanation of important terms.

The body of this paper is divided into eight parts – as follows.

Part 1 consists of a brief explanation of the concept of social investment. Part 2 introduces the concept of cost-benefit analysis. Part 3 discusses how “utility” (the perceived benefits of any activity) might be measured. Part 4 considers how and why social costs and benefits might diverge from costs and benefits as are determined by markets. Part 5 looks more closely at the time horizon under which costs and benefits are considered.

In part 6, the question of how intangible or non-market costs and particularly benefits can be priced is addressed. The alternatives to monetary values that have been employed in the literature are described in part 7. Part 8 illustrates how attempts have been made to assess the utility of services that are delivered under the heading of LTC. As well as considering services that are immediately consumed by recipients of LTC and/or those caring for them, part 8 looks at preventative interventions designed to slow down the incidence, intensity or consequences of physical or mental impairment in old age.

A summary and conclusions are given in a final part.

## 1) Defining social investment

In 2013, the European Commission (EC) launched its *Social Investment Package* (SIP).<sup>1</sup> The package had a double objective. First, it constituted an effort to reinvigorate debate about social expenditure, particularly in a time of fiscal austerity. Second, it provided an opportunity to strengthen the social dimension of its *Europe2020* strategy – a strategy that, until then, had seemed to concentrate primarily on enhancing “economic growth”.

Whilst a new label, “social investment” was also a rebranding of concepts that had been current in social policy discourse for some time. As far back as 1997, the OECD had published *Beyond 2000: The New Social Policy Agenda*, in which it had recognised that, [t]he challenge is to ensure that the returns to social expenditures are maximised, in the form of social cohesion and active participation in society and the labour market.<sup>2</sup> In the same year, in its *Communication on the modernisation of social protection systems*, the EC had introduced the concept of “social protection as a productive factor”, seeing this as addressing the age-old question of the overall costs and benefits of social protection systems – by emphasising their impact on social cohesion, political stability and economic progress.<sup>3</sup> A year later, the idea of the “social investment state” as an alternative, or development of the “welfare state”, was propagated by Anthony Giddens in his exposition of “the Third Way”.<sup>4</sup> The SIP re-expressed this notion, promoting SI as a contributor to *the strengthening [of] people’s current and future capacities. (It) helps to ‘prepare’ people to confront life’s risks, rather than simply ‘repairing’ the consequences.*<sup>5</sup>

The SIP is also to be understood in relation to the increasing attention that policymakers and policy analysts have devoted to “evidence-based policy making”. The *European Employment Strategy* and the subsequently pursued *Open Method of Coordination*, placed considerable emphasis on “indicators and “benchmarking”. The SI approach, by definition, encourages the use of metrics and encourages their development, thereby facilitating comparisons of performance across countries and across interventions. Moreover the espousal of an SI approach is consistent with the adoption of a “new form of public management” that has gained popularity with governments across Europe and beyond. The latter have increasingly farmed out delivery to external bodies and paid on the basis of the results they achieve – implying that they are prepared to put an explicit financial value on the objectives they are trying to achieve.

---

<sup>1</sup> See, CEU (2013) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions *Towards Social Investment for Growth and Cohesion – including implementing the European Social Fund 2014-2020* COM(2013) 83 final.

<sup>2</sup> See, OECD (2007) *Beyond 2000: The New Social Policy Agenda* (Summary of the High-Level Conference held at The Chateau De La Muette, Paris, 12th-13th November 1996).

<sup>3</sup> See, CUE(1999) *A concerted strategy for modernising social protection*. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions.COM(1999) 347 final.

<sup>4</sup> See Giddens, A. *The Third Way: The Renewal of Social Democracy*. Bristol: The Polity Press. The idea is little developed but the emphasis is on human capital investment. There is however discussion of how pension and unemployment benefit might be reformulated as part of a “social investment strategy”.

<sup>5</sup> See, CEU (2013) op cit.

Discussion of SI tends to evoke or provoke discussion of other “social” concepts.<sup>6</sup> SI is often talked about in (almost) the same breath as:

- “social innovation” – meeting social needs and creating new social relationships or collaborations;
- “social enterprise” – supplying products or services in ways that maximize improvements in human and environmental wellbeing rather than profits; and
- “social impact investing” – creating both financial return and a positive social or environmental impact that is actively measured.

Social enterprises have been seen as a possibly necessary component of social investing because such enterprises are better suited to deliver idiosyncratic, “capacitating” (social) services than are more conventional agencies or companies.<sup>7</sup> Social impact investing is often understood to involve the issuance of “social impact bonds”, and both are advocated as being a new way of generating private finance for public service.<sup>8</sup>

Central to most of the descriptions of the role of social impact investing and, by implication, of social investment, is the importance of “measurement”. The OECD, in its definition of social impact investing makes clear that *[t]he investee in the transaction should, at least, inscribe a compulsory reporting clause of its social activity in the statutes, as well as provide a formal evaluation of social impact. In parallel, the investor should, at least, have a compulsory reporting clause for social impact investments.*<sup>9</sup> Advocates of social impact investing have developed extensive explanations of what might be involved or required to justify any proposed investment.<sup>10</sup>

## 2) The objective of cost-benefit analysis

Cost-benefit analysis (CBA) is conventionally employed to investigate whether an action (an investment) is justified in terms of the extent to which it improves wellbeing given the cost that is incurred. Improvement of wellbeing is a concern of welfare economics – which examines propositions to see if they enhance the welfare of individuals in society and helps us choose the option that enhances it the most.<sup>11</sup>

---

<sup>6</sup> See, for example, Doherty, B., Haugh, H. and Lyon, F. (2014) Social Enterprises as Hybrid Organizations: A Review and Research Agenda, in *International Journal of Management Reviews*, Vol. 16, pp. 417-436.

<sup>7</sup> See, Sabel, C., Zeitlin, J. and Quack, S. (forthcoming) Capacitating Services and the Bottom-Up Approach to Social Investment, Hemerijck, A. (ed) *The Uses of Social Investment*. Oxford: Oxford University Press.

<sup>8</sup> See, Mulgan, G. et al (2011) *Social Impact Investment: the challenge and opportunity of Social Impact Bonds*. London: The Young Foundation, and Scherer, J. and Schenk, L. (2012) Advancing Social Impact Measurement to Build an Asset Class: The Appeal of Social Impact Bonds, in *Community Investments*, Vol. 24, No. 1, pp. 10-13.

<sup>9</sup> See, *Social Impact Investment: Building The Evidence Base*. Section 5.4.1.1 *Services supporting long-term elderly care: what works?* Paris: OECD.

<sup>10</sup>For an overview, see Reeder, N. and Colantonio, A. (2013) *Measuring Impact and Non-financial Returns in Impact Investing: A Critical Overview of Concepts and Practice*. London : London school of Economics (EIBURS Working Paper 2013/01).

<sup>11</sup> This is often referred to as “welfarism”. According to the latter, the objective of policy is to maximise the social welfare function, which is the sum of the welfare of all the individuals in society. The term “welfarism” was, apparently, first used by Hicks in 1948, see Hicks, J. (1981), *Wealth and Welfare*, Basil Blackwell, Oxford. (p. 136).

The proposition is usually that policymakers wish to take actions that improve the “utility” of all individuals affected (how “utility” is measured is discussed later).

This might not only be the utility of those directly affected but also that of those with whom they interact. In terms of LTC, it might involve not only the individuals receiving the care service but also their families or neighbours who might be acting as informal carers. This is recognised by, for example, the UK’s National Institute for Health and Care Excellence (NICE) in its guidance with respect to LTC services.<sup>12</sup>

CBA requires that all costs and benefits can be quantified. Costs are often easier to identify than benefits, although it is possible to generate proxies for some benefits (and it is sometimes necessary to generate proxies for costs).<sup>13</sup>

By contrast, cost-utility analysis (CUA) does not require the generation of monetary values for benefits, it only requires a measurement of the perceived benefits of the action (which might be taken as a proxy for utility).

Enhancing utility is the conventional objective of welfarism. Others – following Sen<sup>14</sup> – have tended to emphasise that what should be sought is the enhancing of “capability”. “Capability” is wider than utility, or so it is argued. It relates to what people should be able to do and their freedom to do it. Inter alia, it overcomes the objection that people might adapt to a situation and so record satisfaction with what an external observer might regard as an unsatisfactory state of affairs (for instance, getting used to living in material poverty, or getting used to being a paraplegic).<sup>15</sup>

### **3) How to measure “utility”**

A decision has to be made about whether all utilities are to be counted equally – and so whether improving the wellbeing of some people is more important than improving that of other people.<sup>16</sup>

Welfare economics tends to search for “Pareto optimality” whereby if an action leaves some people better off and no one worse off, undertaking it is desirable.<sup>17</sup>

---

<sup>12</sup> See NICE (2013), *The social care guidance manual*. Manchester: National Institute for Health and Care Excellence (NICE). On the other hand, NICE has been criticised for its “limited ability to take into account wider benefits of medicines, such as the cost of carers for patients with Alzheimer’s”. See *Financial Times*, 15-12-14.

<sup>13</sup> Social cost benefit analysis bears many similarities to what is also called the analysis of social returns on investment (SROI). For an exposition of the latter, and a comparison of it with (S)CBA, see *SROI and Cost Benefit Analysis: Spot the Difference, or Chalk and Cheese?*, produced by Social Value UK (<http://socialvalueuk.org/campaigns/linkages/>).

<sup>14</sup> See Sen, A. (1985), *Commodities and capabilities*. NorthHolland, New York.

<sup>15</sup> On adaption, see Dolan, P., and Kahneman, D. (2008). Interpretations of utility and their implications for the valuation of health, in *The Economic Journal*, 118, pp 215-234.

<sup>16</sup> JS Mill, of course, noted that it was “quite compatible with the principle of utility to recognise the fact, that some kinds of pleasure are more desirable and more valuable than others. It would be absurd that while, in estimating all other things, quality is considered as well as quantity, the estimation of pleasures should be supposed to depend on quantity alone”. See Mill, J. S. (1998) *Utilitarianism*. Oxford: Oxford University Press. (p 56).

<sup>17</sup> For more on Pareto optimality, see Barr, N. (2012), *Economics of the Welfare State* (5th ed.). Oxford: Oxford University Press. (especially Ch. 3.2.2).

A utilitarian approach treats each person as equal and an improvement of any one person's wellbeing by one "util" is regarded the same as improving another person's wellbeing by one "util".<sup>18</sup> By contrast, an egalitarian approach would give more weight to giving one "util" more of wellbeing to a disadvantaged person than to giving one "util" more of wellbeing to an advantaged person (perhaps because the disadvantaged person is financially poor or physically handicapped). A Rawlsian approach would suggest that resources be allocated to assisting the most disadvantaged – so it is an extreme case of the egalitarian approach.<sup>19</sup>

NICE claims to adopt a utilitarian approach when making judgments. Those who adhere to a capability approach acknowledge inequalities and seek to compensate for them by making ability to function more equal.<sup>20</sup>

#### **4) Social and market costs and benefits**

The concern is with social costs and benefits, as well as social wellbeing – so it is not only about individual costs and benefits as recorded by prices in the market.

Market prices can diverge from social values because of:

- a. uncompetitive markets (monopolies, etc.);
- b. externalities;
- c. imperfect information; and
- d. taxes, which are distorting in themselves.

The implications of monopolies are well understood. Monopolies in the producer market lead to suboptimal output. Prices exceed the marginal cost of production, leading to the producer earning extraordinary profit.

Information asymmetries usually work to the disadvantage of the buyer in a market, since the supplier is presumed to have superior knowledge about the product. Purchase of a care service is usually a unique transaction, and the ability of the purchaser to acquire full information about what is available and/or offered is limited. Information asymmetries can create quasi-monopolies. On the other hand, insofar as people seeking to insure themselves for care needs have better information about their condition than do insurers, the latter might push up prices to ensure that their financial

---

<sup>18</sup> A "util" is a unit of utility. In the late 19<sup>th</sup> century, the economist Edgeworth described an hypothetical "hedonimeter" that could measure utility – *an ideally perfect instrument, a psychophysical machine, continually registering the height of pleasure experienced by an individual*. See Colander, D. (2007), Edgeworth's Hedonimeter and the Quest to Measure Utility, in *Journal of Economic Perspectives*, Vol. 21, No. 2 pp. 215–225

<sup>19</sup> See Rawls, J. (1971), *A Theory of Justice*. Cambridge MA: Harvard University Press. Here it is argued that the only inequalities that should be permitted are those that work to the advantage of the worst-off. On weighting in general, see Adler, M. (2012) *Well-Being and Fair Distribution: Beyond Cost-Benefit Analysis*. Oxford: Oxford University Press, and Boadway, R. (2006), Principles of Cost-Benefit Analysis, in *Public Policy Review*, Vol.2, No.1, pp. 1-44.

<sup>20</sup> See NICE (2008), *Social Value Judgements: Principles for the development of NICE guidance* (Second Edition). Manchester: National Institute for Health and Care Excellence (NICE).

interests are protected. Here, information asymmetry means that prices are too high for all but the worse cases and others are discouraged thereby from purchasing the service in question.<sup>21</sup>

Externalities are well understood in discussions of, for example, polluting emissions. Any social intervention (or lack of it) might produce benefits (or costs) to society as a whole, as well as for those directly impacted. With respect to LTC, people might feel well because they live in a society where they know that older people live a comfortable life.<sup>22</sup>

Some externalities generate complementarities (for example, improving formal, publically-provided LTC services could free up informal carers to go out to work and so enhance labour supply, tax revenue, etc.).

Many public interventions require public financing, and this – in so far as it requires taxation or borrowing – produces distortions itself. Accordingly, there is also a need to take account of the “marginal cost of public funds”.<sup>23</sup>

## 5) Setting a time horizon

Investing, by definition, involves a down-payment that produces a stream of future benefits. One feature of the SIP was that it stressed how interventions should be not merely palliative but also preventive – strongly implying that they might well involve investments.<sup>24</sup> These investments pay off only at a later date, so current cost needs to be compared with future gains – in other words, they need to be discounted. A discount rate (which is, effectively, a negative interest rate and takes account of the riskiness of the investment and the impact of inflation), can be found in the market.<sup>25</sup> However, whilst individuals might receive interest on their savings – at a market rate, if they pay tax on interest income, the interest rate they receive is lower. This is another case of market prices not corresponding to social values (see above).

The market and the social discount rates vary in other ways, too. Discount rates will vary according to the preferences of those making the investment. They might have a stronger or weaker preference for instant gratification and/or place lesser benefit on the wellbeing of future generations than they do upon their own. One commentator described the situation as follows: *Financial markets are composed of present-day agents disclosing personal trade-offs regarding their todays and tomorrows. However, government, as care keeper for today's people and people yet to be*

---

<sup>21</sup> See Barr, N. (2012), op cit.

<sup>22</sup> This is what is often referred to as the option value. Another example might be a city with extensive cultural provision. Not all people wish to visit the theatre, opera, museum or gallery often, but they value the opportunity to be able to do so if they wish. They believe it enriches the society in which they live and they are prepared to pay the taxes that support the cultural infrastructure. On “option values”, see Cornes, R. and Sandler, T. (1996), *The Theory of Externalities, Public Goods, and Club Goods*. Cambridge: Cambridge University Press.

<sup>23</sup> See Pigou, A.C. (1948), *A Study in Public Finance*. 3rd ed. London: Macmillan.

<sup>24</sup> The term “prevent”/“prevention” appears 13 times in the EC’s initial communication.

<sup>25</sup> With a discount rate of 3.5 per cent, €100 in one hundred years’ time is worth only €3 today.

born, must exhibit concern for the welfare of future people, and it must make trade-offs regarding today's people and tomorrow's people.<sup>26</sup>

A commonly accepted method for calculating the social discount rate is the so called “Ramsey Equation”. This calculates the rate as a function of the rate of growth of consumption (capturing the rate of growth of the economy), a rate of time preference (capturing impatience), and the elasticity of marginal utility of consumption (capturing how fast the increase in utility of an additional unit of consumption declines as consumption increases). However, whilst the growth rate of consumption can be predicted (more or less), a rate of time preference usually has to be inserted, as does a marginal utility of consumption. The higher the former, the higher both are (assuming growth is positive), the higher the discount rate. Moreover, selecting both involves making an ethical judgment.<sup>27</sup>

NICE continues to use a real rate of 3.5 per cent when discounting benefits from health and social care interventions.<sup>28</sup> This is the same as the UK government uses when assessing all public investments.<sup>29</sup> Currently, index-linked, long-term gilt rates are close to one per cent.

## 6) Translating costs and benefits into monetary values

There are no market prices for some of the outputs of social policy interventions. A relevant example is the value of an environmental amenity, but pertinent to LTC would be something like “improved health”.

Various methods have been suggested as appropriate to generate values of benefits. These include:

- a) hedonic pricing, which uses behaviour in other contexts to infer the value of something – for example, to estimate the value of a house that is “close to good school” by comparing the prices of otherwise identical houses;
- b) contingent valuation, whereby respondents to surveys are asked how much they would be willing-to-pay (WTP), or willing-to-accept (WTA), for some change in a non-marketed output, and where WTP is often associated with a “good”, WTA with a “bad”, and WTP relates to “equivalent value” and WTA to “compensating value”;

---

<sup>26</sup> See Griffen, R. (1998), The fundamental principles of cost-benefit analysis, in *Water Resources Research*, Vol. 34, No. 8, pp. 2063-2071.

<sup>27</sup> See Ramsey, F. (1928) A Mathematical Theory of Saving, in *Economic Journal* Vol.38, No.152, pp 543–559. The equation is  $r = \rho + \theta g$ , where  $r$  is the discount rate,  $\rho$  is the rate of time preference,  $g$  is the rate of growth and  $\theta$  is the marginal utility of consumption. For this reason, much lower discount rates have been applied for, for example, the cost of global warming. One major study, looking at the case of global warming, used the Ramsey Equation to generate a discount rate as low as 1.4 per cent, and justified this with the argument that using a pure rate of time preference higher than zero when calculating a social discount rate was ethically inappropriate. Here,  $g$  was assumed to be 1.3 per cent,  $\rho$  0.1 per cent and  $\theta$  was set to one. See, Stern N. (2007) *The economics of climate change: The Stern review*. Cambridge: Cambridge University Press. The low  $\rho$  (close to zero) and the low  $\theta$  were ethical judgments. Others, based upon observation, have tended to use values of 2-3 percent for  $\rho$  and set values between 1 and 4 for  $\theta$ . A rate of 3.5 percent is frequently employed for  $g$ .

<sup>28</sup> See NICE (2013), op cit.

<sup>29</sup> See HM Treasury (2014) *The Green Book: Appraisal and Evaluation in Central Government*. London: The Stationary Office.

- c) choice modelling (CM), which is similar to contingent valuation, except that it uses a survey instrument to ask people to simultaneously consider a range of options, as opposed to a single option; and
- d) a life satisfaction approach, which entails estimating (micro-)econometric models in which life satisfaction is the dependent variable and the holding of some non-market good, together with income and other relevant covariates, is one of the explanatory variables – for example, if an increase in income of £1000 were to increase life satisfaction by one point on some metric, and receipt of a service increased life satisfaction by one point, then the value of the service received would be imputed as £1000.

Some of these approaches are deemed more acceptable than others. Asking people how much they would need to be compensated has been criticised not only as being *not equivalent to the mainstream economic efficiency concept of Pareto optimality*, but also as *pos[ing] ethical worries for welfare economists due to the hypothetical nature of the tests. Some groups of people will inevitably experience losses as a result of a project's construction. For a single project this consequence may not be very troublesome for society as a whole. On the other hand, it may be contentious if losses are incurred by people who are already disadvantaged in some manner (e.g., by poverty)*.<sup>30</sup> Choice modelling, by contrast, is presumed less open to bias.

The life satisfaction approach is probably the newest way of trying to put a market value on utility, but it remains rather experimental and has been deemed not always to yield “robust” results and sometimes to generate “implausibly high valuations”. For these reasons, the UK Government, in the annex to its *Green Book on Appraisal and Evaluation in Central Government* that deals with valuing non-market impacts, does not subscribe to its use.<sup>31</sup>

## **7) Alternatives to monetary values**

Cost utility analysis (CUA) does not attempt to price benefits in monetary terms but, instead, uses measures of the wellbeing that is generated by an intervention. CUA is frequently used to determine how health (but also, see below, social care) resources might optimally be allocated.

The consequence of any medical/health intervention/action is frequently measured in terms of Quality Adjusted Life Years (QALYs) achieved – QALYs taking into account Health-related Quality of Life (HrQoL) and the duration for which improvements persist. HrQoL can assess an outcome that might involve keeping old people in hospital and thereby preventing them from falling, which is positive, but recognises that by doing so it reduces their social interaction and independence, which is negative.

However, HrQoL can be criticised as too narrow. It is also important to take account of how people feel about their situation, or the extent of their “capability”. It can be argued that there is a need to take account of overall Quality of Life (QoL).

<sup>30</sup> Griffen, R. (1998), op cit, p 2064.

<sup>31</sup> See HM Treasury (2014), op cit, especially *Annex 2: Valuing Non-market Impacts*. See, also, Fujiwara, D. and Campbell, R. (2011), *Valuation Techniques for Social Cost-Benefit Analysis: Stated Preference, Revealed Preference and Subjective Well-Being Approaches. A Discussion of the Current Issues*. London: HM Treasury and Department for Work and Pensions.

Measuring QoL requires some measurement of “utility” or wellbeing. Simple measures might involve a scale, for example, from 0 that equals being dead to 1 that equals being in perfect health. Even negative scores for a state of “worse than death” can be countenanced. Full measures of wellbeing would need to go beyond health to cover non-health dimensions such as independence, dignity and social interaction.

A number of utility valuation models have been suggested in the literature. Three reoccur.

- a) the Standard Gamble (SG), which involves presenting people with a choice between two alternatives. A case might be a health state that is certain (e.g., continued use of a wheelchair) and a gamble that involves achievement of a better state (e.g., full mobility, valued at 1) but where the intervention to achieve it might result in a worse state (e.g., being bedridden for life, valued at 0). People might be asked how sure they would have to be of the better outcome for them to elect for the intervention. If they were indifferent between remaining in a wheelchair and an intervention with an 85 per cent chance of success but a 15 per cent chance of it worsening their condition, then the utility of being wheelchair bound would be calculated as 0.85;
- b) the Time Trade-Off (TTO), which involves presenting people with a choice between continuing to be in a poor state and being in an improved state but living less long. In the case above, they would be asked how many years they would be prepared to sacrifice for moving from being wheelchair bound to fully mobile. If they were prepared to accept 15 years of full mobility instead of 20 years in a wheelchair, the utility of being wheelchair bound would be calculated as 0.75; and
- c) the Rating Scale (often called the Visual Analogous Scale or VAS), which involves presenting people with a line bounded by the best and worst states of affair. In the case above, these would be, respectively, full mobility and bedridden, and the people concerned would be asked to place intermediate states of affair at intervals – the distance representing how much of an improvement they value this at. The VAS has been deemed superior to the SG and the TTO in that it requires people neither to make choices nor to take decisions in a condition of uncertainty. If each state of affairs were on a scale bounded by -1 and 1 – with, in the example above, being bedridden scored as 0 – scores multiplied by the number of years of life would generate a QALY.

In practice it seems as if those authorities using CUA tend to rely on the second or third of the approaches. None appear to use the SG.<sup>32</sup>

## **8) Efforts to measure utility of LTC services**

CUA has been applied on a wide scale to measure clinical interventions and the supply of drugs. An acknowledged leader of its use has been NICE.<sup>33</sup> More recently, NICE has turned its attention to developing “guidance” in the area of social care. Social care has also been recognised as a legitimate

---

<sup>32</sup> See EQ-5D-3L User Guide: Basic information on how to use the EQ-5D-3L instrument, Table 1.

<sup>33</sup> NICE has its equivalents in other countries. Most well-known are the Centers for Medicare & Medicaid Services in the USA and The Institute for Quality and Efficiency in Health Care (IQWiG) in Germany.

object for social impact investing, although actual examples of the application of this approach to are limited. Rather, cases have been adduced of where interventions have generated “benefits”.<sup>34</sup>

Efforts to measure the benefits of social service provision have been undertaken using a metric called OPUS-SC (older people’s utility scale – social care), developed by the Personal Social Services Research Unit (PSSRU). OPUS elicited information over five domains – respectively:

- i) food and nutrition;
- ii) personal care;
- iii) safety;
- iv) social participation and involvement; and
- v) control over daily living.

The presence of needs/deficiencies under each heading was measured on a scale of 0 to 3.<sup>35</sup> OPUS-SC was developed further into ASCOT (the Adult Social Care Outcomes Toolkit) that covers nine attributes, adding

- vi) occupation (whether meaningfully occupied);
- vii) accommodation cleanliness and comfort; and
- viii) dignity.

Hereby, it places greater emphasis than OPUS on the emotional and relational aspects of quality of life rather than mere ability to function. As before, needs/deficiencies are measured on a four- or, in some versions, a three-point scale.<sup>36</sup>

ASCOT has been recognised by NICE as one of the instruments that may be used as a measure of social care quality of life. NICE also suggests the use of a second metric – ICECAP-O (ICEpop CAPability measure for Older people) – to measure capability.

ICECAP generates scores on five attributes:

- i) attachment (love and friendship);
- ii) security (thinking about the future without concern);
- iii) role (doing things that make you feel valued);
- iv) enjoyment (enjoyment and pleasure); and
- v) control (independence).

Descriptions of ICECAP by its developers – the University of Birmingham Colleges of Medical and Dental Sciences – emphasise how what it measures is linked to Sen's capability approach (see above). Again, a four-point scale is used.<sup>37</sup>

The extent of actual utilisation of ASCOT in its pure form is limited. However, since 2011 the UK Department of Health has published an Adult Social Care Outcomes Framework (ASCOF) that is designed to inform and support improvement and to strengthen transparency and accountability

---

<sup>34</sup> The most extensive listing appears to be that offered by the OECD (2015) op cit, which lists a number of examples. These do not price the benefits, merely enumerate “success rates”.

<sup>35</sup> See OPUS: A Measure of Social Care Outcome for Older People, PSSRU RESEARCH SUMMARY 23 MAY 2002 at <http://www.pssru.ac.uk/pdf/rs023.pdf>.

<sup>36</sup> See *ASCOT Main guidance v2.1*, PSSRU Discussion Paper 2716/3 September 2011, at <http://www.pssru.ac.uk/ascot/downloads/guidance/main-guidance-v2.pdf>

<sup>37</sup> For a description of ICECAP-O, see <http://www.birmingham.ac.uk/research/activity/mds/projects/HaPS/HE/ICECAP/ICECAP-O/index.aspx>.

amongst local authorities – the bodies in England with statutory responsibility for care provision.<sup>38</sup> ASCOF reports under four domains – viz:

1. enhancing quality of life for people with care and support needs;
2. delaying and reducing the need for care and support;
3. ensuring that people have a positive experience of care and support: and
4. safeguarding adults whose circumstances make them vulnerable and protecting them from avoidable harm.

ASCOF draws data from the Adult Social Care Survey (ASCS) that all English local authorities have been required to undertake on an annual basis – drawing from a sample of those receiving care services that are financed by public money. The ASCS uses ratings by those cared for under the eight ASCOT headings listed above. It also asks a more general question that allows an indicator to be generated of how those receiving care services rate the quality of their life. This is reported on a five-point scale. ASCS also collects information on how satisfied people are with the care services that they receive – again on a five-point scale.

Data from the responses on the eight more specific headings has been used to build a Social Care Related Quality of Life (SCRQoL), whereby those achieving a maximum score (24 points or the maximum of 3 on each of the eight items) have “no unwanted needs”. NICE, in its social care guidance, suggests the SCRQoL as one of the indicators that can be used to assess service benefits.

ASCS results under the various headings are published at local authority level on a biennial basis.<sup>39</sup> The ASCOF results are also published at a local authority level.<sup>40</sup>

It is to be noted that the SCRQoL indicator:

- a) refers to the QoL of the individual receiving care services, and does not refer to the QoL of family members, or of others, who might be providing informal care; and
- b) provides no algorithm that seeks to translate satisfaction scores into monetary values.

The fact that the SCRQoL refers only to the direct recipients of care services might be seen as out of line with NICE’s recognition that *effects on ..... carers (whether expressed in terms of health effects, social care quality of life, capability or wellbeing)* and not only on service users *are the intended outcomes of social care interventions and programmes. Moreover, any wellbeing-based approach acknowledges that the goal of services and support is to improve the wellbeing of service users and their families.*<sup>41</sup> Moreover, it should be noted there does exist a biennial Personal Social Services Survey of Adult Carers that covers informal, unpaid carers. This collects data that is used to measure their quality of life, as well as data about their satisfaction with help they receive from formal care services.<sup>42</sup>

The fact that SCRQoL does not generate an equivalent to QALYs, the achievement of which can be compared with the expenditures incurred, has so far been accepted by those using it. In the more

---

<sup>38</sup> The Department of Health is responsible only for England. Health is a “devolved power”, so that the governments of Scotland, Northern Ireland and Wales use their own procedures.

<sup>39</sup> See <http://www.hscic.gov.uk/catalogue/PUB14386>.

<sup>40</sup> See <http://ascof.hscic.gov.uk/Outcome>.

<sup>41</sup> See NICE (2013) op cit, my emphasis.

<sup>42</sup> See <http://www.hscic.gov.uk/catalogue/PUB18423>.

theoretical literature discussing the worth-whileness or otherwise of interventions and their marginal impact, cost is illustrated on the horizontal axis and utility on the vertical, but no effort is made to value utility in monetary units.<sup>43</sup>

The preventative dimension of the sort of interventions promoted under the SIP is of particular relevance to LTC. Although many services for the frail elderly are aimed at improving consumption – enhancing the QoL of those needing care or of those who have to care for them, some might involve making investments. Releasing some people from the requirement to spend much of their time to providing informal care services by allocating public resources to the expansion of formal care services can be considered the equivalent of committing current resources in the expectation of obtaining a future return. That return is an increase in the supply of labour and an expanded tax and social contribution base – an outcome that most commentators would regard as desirable.<sup>44</sup> The Commission’s Staff Working Document (SWD) *Long-term care in ageing societies*, which accompanied the SIP, even if it did not speak directly in favour of more “public investment” commented on how *[i]n many Member States, public expenditure is at present only the tip of the iceberg when it comes to calculating the societal cost of caring for frail older people in Europe. Expanding formal services, leading to higher public expenditure, will result in hitherto hidden costs becoming visible, with social protection to cover long-term care being developed to share the risks of disability in old age more equitably.*<sup>45</sup>

The SWD was more explicit when it sought to explain why resources might be allocated for preventative or rehabilitative measures or measures to improve the opportunities for older people to live independently. It pointed out that such measures could *reduce the incidence of frailty, postpone its onset and reverse or mitigate the course of frailty, functional limitations and disability. People who are fit when they become old and seek to remain physically and mentally active not only have a better chance of avoiding or postponing frailties, they are often also better at managing functional decline when it occurs.*<sup>46</sup> Equally, a subsequent publication setting out *A Vision for Adult Social Care* described how *[e]ncouraging senior citizens to participate in physically and mentally stimulating activities in various settings, such as education, sport centres, volunteering organisations and day care centres, can halt the course of decline and help maintain and sharpen faculties.*<sup>47</sup>

Contributing to prevention, rehabilitation and improving opportunities for independent living, the Commission suggested, were policies and interventions involving:

---

<sup>43</sup> See, for example Forder, J. and Fernandez, J.- L. (2015) *Using a ‘wellbeing’ cost-effectiveness approach to improve resource allocation in social care*. Quality and Outcomes of Person-Centred Care Research Unit, Discussion Paper 2893.

<sup>44</sup> It is noticeable the countries what have conventionally been criticised for their low employment rates of older people – an in particular of older women – are often the same countries that lack socialised provision of eldercare services. Cases in point are many of the southern European countries, including Italy, Spain, Greece and Cyprus, but also many central European countries, including Poland, Hungary and the Baltic States.

<sup>45</sup> See *Social Investment Package: Long-term care in ageing societies - Challenges and policy options*. Brussels, 20.2.2013, SWD(2013) 41 final.

<sup>46</sup> See p. 16ff. See also *A Vision for Adult Social Care: Capable Communities and Active Citizens*. Department of Health: London, 2010, which contains a “vision for prevention”.

<sup>47</sup> See Social Protection Committee and European Commission, *Adequate social protection for long-term care needs in an ageing society*. Luxembourg: Publications Office of the European Union, 2014.

- the closer integration of health and care arrangements (including to reduce “bed-blocking” by those who could be released from hospital but who require nursing care in an institution or at home);
- smart homes (that are appropriately modified and include “tele-care” devices);
- age friendly environments (including transportation systems);
- help for informal carers (including better/more flexible working arrangements); and
- improvements to the status and qualifications of the formal care workforce (to enhance the quality and efficiency of services delivered).

However, although concrete examples of their implementation were given, much of the description was aspirational rather than evaluative. The impact of preventative interventions is often more difficult to measure than that of palliative interventions. Insofar as some require people making changes to their lifestyle, the components of policy are likely to be multiple and wide-ranging. Identifying which component results in what, and thus of attributing which benefits to which costs, is difficult. Moreover, impacts will often be in the future – in the case of some lifestyle changes, measures might be aimed at relatively young people but the benefits will be enjoyed only when they are old.<sup>48</sup> This means the rate at which they should be discounted is highly important, too.

### **Summary and conclusions**

At present, the understanding of the concept of SI, and of how its principles might be applied in the area of LTC, is relatively underdeveloped. Assessing LTC interventions by application of procedures developed under the heading of social cost-benefit analysis is a work in progress.

One of the principal difficulties that adherents of the SI or the social cost-benefit analysis approach have is how outcomes can be measured in monetary values. Many values have to be generated by proxy and often market and social values are not homogenous.

In the face of such difficulties, those looking at effectiveness of interventions tend to rely on cost-utility analysis instead. However, even here, there is debate about what utility is and what is actually being measured. The cost-utility analysis approach has been used to appraise the worth-whileness of health interventions, but with respect to LTC interventions it is still in its infancy.

Studying LTC reveals how important the question of whose utility should be measured is. Interventions impact not only on the direct recipient of care but also on their families and neighbours. The information requirements, as a consequence, become greater.

Interventions that prevent the occurrence of particular outcomes create challenges for cost-benefit and cost utility analysis that are probably greater than those associated with interventions that merely mitigate the experience of such outcomes. They require attention to be paid to attribution close analysis of attribution and often produce impacts only a considerable way into the future.

---

<sup>48</sup> Some of these questions are posed, without the intention being to provide answers, in Curry, N. *Preventive Social Care: Is it Cost Effective?* London: The King’s Fund, 2006 (Background paper for the Wanless Report “Securing Good Care for Older People”).

In short, when attempting to construct social balance sheets, care should be taken. As one commentator on social impact investing concluded, *[t]he impact side of the [cost benefit/utility] equation faces a risk of wishful groupthink. Impact is inherently hard to measure. Without clear or agreed definitions, it may be tempting to overstate or to double count. In the world of commercial investing, some market players usually, although sadly not always, have an incentive to question the quality and quantity of profits that people report. The second bottom line [measuring the social as opposed to the financial return] lacks this mechanism: no one who makes a living from social investing has much incentive to question the quality or quantity of impact that organisations report. Vigilance will, therefore, be in order, with the emphasis on quality of information rather than quantity.*<sup>49</sup> This sets a challenge for all social investors, and thereby one for those considering its role in the enhancing of the provision of LTC. It is a challenge that the SPRINT project will try to address.

---

<sup>49</sup> See, Morris, P. (2015) Mixing financial oil and water to become more sociable, in *Financial World*, October/November, pp. 48-50.