

MSc INTERNATIONAL HEALTH MANAGEMENT

SEPTEMBER 2014

BS0450 HEALTHCARE REPORT

**DECISION-MAKING ON THE RANGE OF HEALTH SERVICES
PROVIDED FREE OF CHARGE:**

*Should Health Systems Constrain the Range of Health Services that are
Available to Citizens Free of Charge? If So, How Should They Determine Which
Services are Included In the Benefits Package?*

DENIZ MORALI

CID: 00889032

WORD COUNT:5,050

Abstract

Continuous demand has been causing heated debates as health systems struggle to meet that demand using limited resources.

At this point, health systems should constrain the range of services that are available to citizens free of charge ('scope'). Besides acting as a buffer to helping sustain the economy, scope constraints would prevent market failures and inequalities caused by moral hazard.

Scope constraints require effective prioritization and are suggested to involve public opinion, transparency, explicit tools, consideration of possible outcomes and continuous review. A recommended tool is Program Budgeting and Marginal Analysis, which, in combination with others, can maximize the overall benefits derived from resources.

It is critical to make decisions in a way that a fit between priorities and values of the society is created and maintained. Therefore flexibility should be at the heart of decision-making process of health systems, helping it adapt to ever-changing circumstances and make the most out of the suggested tool and processes.

Table of Contents

- 1. Introduction.....1**

- 2. Constraint on the Range of Free Services2**
 - 2.1. Overview.....3
 - 2.2. Advantages and Disadvantages of Constraining the Range.....4
 - 2.3. Discussion7

- 3. Determining the Benefits Package.....8**
 - 3.1. The Decision-Making Process.....8
 - 3.2. Tools..... 10
 - 3.2.1. *Needs Assessment* 10
 - 3.2.2. *Core Services*..... 11
 - 3.2.3. *Cost Analyses*..... 11
 - 3.2.4. *Program Budgeting and Marginal Analysis*..... 12
 - 3.2.5. *Technology Assessment*..... 12
 - 3.3. Hybrid Approaches 13
 - 3.4. Discussion 15

- 4. Conclusion 16**

- 5. References..... 17**

1. Introduction

States have always faced continuous demand for public services, yet had finite resources to respond to them (Randle & Kippin, n.d.; Glassman & Chalkidou, 2012). In addition, with an ever growing and aging population (The World Bank Group, 2013), public spending has risen steadily over the past years and continues to rise (Glassman & Chalkidou, 2012). The Organization for Economic Co-operation and Development (OECD) has estimated that age-related social expenditures will increase to 26% of gross domestic product by 2050 (Bishop, 1928). Given public spending limits and with demand expected to rise, there is a requirement for effective management of resources across all publicly funded fields including defence, education, energy, transportation, health care and many others to ensure a sustainable economy and maintain the wellbeing of citizens. It has been a prominent issue for governments all around the world to determine what share of the pie each sector receives. Among these, health care spending requires greater consideration as it carries with it moral and challenging implications. It has been critical to decide how to constrain the health care budget to achieve cost reduction while promoting equity and wellbeing at the same time. One of the most established health systems in the world, the National Health Service (NHS) in the U.K. has been facing the challenge of creating £15-20 billion efficiency savings by 2015 and maintaining quality at the same time, in an attempt to effectively sustain the health system (NHS Institute for Innovation and Improvement, n.d.).

Among many others, an important question to address remains debatable: should health systems limit services that are provided free of charge? Should the range of services provided for free be one of these areas to make budget constraint decisions about?

The aim of this report is to arrive on a decision on whether health systems should constrain the range of services that are available to citizens free of charge and to discuss how the benefits package should be determined. Firstly, it critically discusses the advantages and disadvantages of constraining services by using theoretical models and critical appraisal of the literature. In the second part, it suggests ways to decide on the benefits package, based on the evaluation of different priority-setting approaches with international examples and health care managerial focus.

2. Constraint on the Range of Free Services

As populations grow older, together with the effect of urbanized lifestyles, chronic illnesses such as circulatory and respiratory diseases, cancer and diabetes increase in prevalence (Bishop, 1928; Miraldo, 2014b). According to the Deloitte 2014 Health Care Outlook Report (Deloitte, 2014), these shifting demographics are expected to increase demand for health care services and cause an increase in health spending of 4.4% in developed and emerging countries in the next three years. Health care spending, however, suffers from a scarcity of resources as all sectors do. However, limiting health care spending is usually problematic since human health cannot be compromised. Philosopher Norman Daniels (1985) sees health care as a distinct field as it aims the “normal functioning” of humans (p.26). However, every penny spent on health care limits the money available for other fields that are equally as relevant. This is an opportunity cost. Even if it is very essential, health care cannot be considered ‘the only important good’ according to Daniels (n.d.) (p.4). Butler (1999) supports this statement by stating that even though very important, health care cannot be regarded much more essential than all other public sectors in a way that the budget is spent on the other sectors only after all health care need is fully met. This problem poses a fundamental challenge for health care decision-makers.

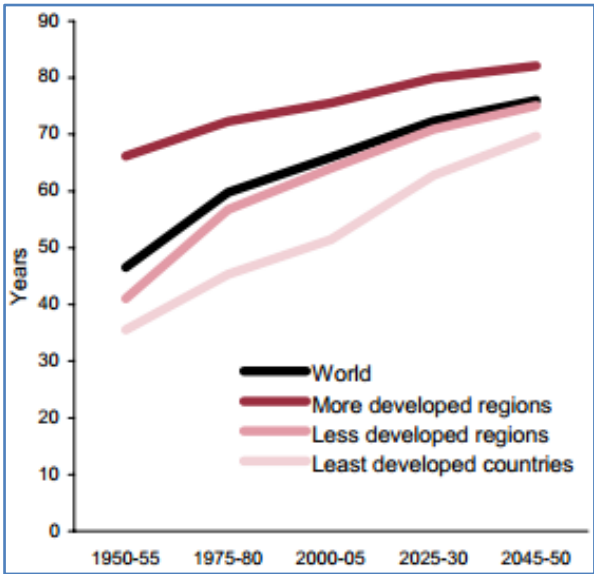


Figure 1: ‘Life expectancy at birth; world and development regions, 1950-2050’

(United Nations, 2012:p:6).

2.1. Overview

Countries that have a health system mainly funded publicly incorporate two general mechanisms for fund collection: taxation and social insurance. France, Austria, Belgium, Japan, Germany and the Netherlands and Turkey are examples of predominantly social insurance-based health systems funded through payroll tax contributions to sickness funds. U.K., Canada, Sweden, Italy, Spain, New Zealand, Denmark, Norway, Greece and Portugal exemplify predominantly tax-based health systems where health budget is collected as a part of general revenue taxes. (Miraldo, 2014c)

As tax-based and social-insurance based systems are especially motivated towards promoting equity and fairness among the population (Miraldo, 2014a), the problem reaches to the top when the pooled funds need to be allocated; because it is a hardship for governments to afford all services for everyone and provide them free of charge, as they are confronted with the aforementioned problem of a limited budget and unlimited demand. Therefore many efforts have been placed on debates about limitation to some aspects, which brings about “rationing” discussions; a common tool to decrease health spending in many countries.

Health care can be rationed as three different dimensions: ‘breadth’ (who is covered), ‘scope’ (which services are funded) and ‘depth’ (the extent to which those services are funded) (Teutsch & Rechel, 2002), (p.3). Each country accomplishes this differently; by compromising different dimensions (Chen & Fieldman, 2000) as it is critical to promote both efficiency and equity although the main objective of public expenditure in health is to improve both (Wong & Bitran, 1999). For example, a system can allocate resources to fund a relatively smaller set of services (scope) offered to relatively more citizens (breadth) while another system does it the opposite way (World Health Organization, 2010). Being one of these dimensions, scope limitation leaves policy makers with the question of whether to limit the range of health services that are available free of charge. According to Wong & Bitran (1999), many people react negatively towards the idea of rationing health care in terms of scope it as they see scope limitation decisions immoral. While some systems prefer to constrain the range, some do not: ‘each country fills the box in its own way’, as stated by World Health Organization (2010), (p.14).

2.2. Advantages and Disadvantages of Constraining the Range

Providing and promoting health and welfare of citizens has been regarded as the ultimate goal of states all around the world as they have the unique and most essential duty to promote health (Daniels, 1985; Miraldo, 2014e). Equality in access to health care and financial risk protection have been other important objectives of health systems (Segal & Chen, 2001; Miraldo, 2014e), requiring the protection of disadvantaged groups helping and supporting the poor to ensure equality in terms of access to health care (Kutzin, Cashin & Jakab, 2010). Under this circumstance, constraining range of health services acts as a shadow on the financial risk protection of the population, especially the poor. Wong & Bitran (1999) state that there are many people who see scope limitation decisions immoral as they mean 'the difference between life and death' to many others (p.10).

Moreover, offering as much services as possible addresses the health and wellbeing of the population in a holistic way, which strengthens the health infrastructure of the state as it helps with better prevention of diseases and avoidance of incidents, thus lowering health spending in the long run (Obimbo, 2003). In surveys conducted in Germany, majority of citizens reported that any health care related cost should be compensated for by the government without any restriction (Oduncu, 2013). In this case, the idea of providing only essential services as for free as the benefit package was rejected as they favoured unlimited funding for health care services. Higher tax levels or constraints of spending on other publicly funded fields, which would be needed in that case, were highly favoured (Oduncu, 2013).

U.K. exemplifies a very comprehensive health system by providing a large set of services under its benefit scheme (Chen & Fieldman, 2000; Herring, 2012). The main services excluded are prescriptions, dental treatments and eye tests (National Health Service, 2013). Moreover, in the U.S. health system which is run mostly by out-of-pocket payments and private insurers and providers, steps have been taken towards a more comprehensive private and public health system. The Affordable Health Care for America Act, signed into U.S. law in 2010 (Gruber, 2011) provides a greater range of services that are available to Medicaid and Medicare patients (Patel, 2013), (people covered with public insurance, making up 30% of the U.S. population overall (Rice et al,

2013)), eliminating the limits on benefits and requiring coverage for preventive and immunization services. Patel (2013) states some benefits of the act as potentially higher employment rate with more people working, a decrease in the frequency of re-hospitalization, promotion of value and quality and therefore decrease in the long-term costs. These reforms are predicted to improve the quality of care delivered as well as protecting the long-term economic growth (Patel, 2013).

On the other hand, we know that need for more health care spending pose a problem which is hard to cope with in the circumstance of limited budget. Constraining the range of health services that are available for free would firstly reduce budget spending and enable the funds to be allocated to other fields. It has been used as a mechanism to enable budget savings and sustain the economy. As almost all the countries constrain the publicly funded package, during times of crisis they focus on constraining the scope even more. After the collapse of the Soviet Union in 1989, some eastern European countries such as Belarus, Kazakhstan, Russian Federation, Ukraine and Uzbekistan have gone to scope reduction in health care in the past decades, by introducing user charges to sustain their new independent economies as they went into economic hardship (Kutzin, Cashin, & Jakab, 2010), although comprehensive coverage had been one of the founding principles of the Soviet Union for years (Teutsch & Rechel, 2002).

On the other hand, it would also be problematic to restrict the budget that could be used in other publicly funded fields just to be able to provide every health service free of charge. In other words, constraining the scope and feeding into other fields with subsequent savings would support advances in other fields such as education, transportation and construction to provide better and safer infrastructure and promote mental health, (cause of most chronic diseases (Perry, Presley-Cantrell & Dhingra, 2010)), which in turn translate into better state of health and wellbeing of the population. As a result, prevention of several avoidable diseases and incidents could be achieved. Research and development in health care is also an area where the subsequent funds could be used to provide better quality care, prevent and treat more substantial and vital conditions. Brock (2014) states that providing all services to citizens regardless of the costs and benefits would be unethical as it would cause the use of resources in an inefficient manner since there are other responsibilities to the citizens in other fields. To illustrate, while nearly 95% of health services were being publicly

funded in the Netherlands in 1990s, it was then decided that non-essential services should be eliminated from the benefits package with the aim of providing the essential services easily when needed (Mitton & Donaldson, 2004). According to Lock (2014), majority of deaths from major diseases are caused by people's risky health behaviour such as unhealthy eating and tobacco use. Therefore, increasing health care spending to use the funds in the treatment of preventable diseases is not efficient.

In addition, scope reduction would promote equity as it would also help cover more people with the limited budget. A substantial example is the state of Oregon in the U.S. where services high in cost and low in effect were eliminated from Medicaid package and the savings were used to increase the number of people covered instead (Mitton & Donaldson, 2004) by enabling them to receive as much services as possible (Herring, 2012).

Last but not least, scope limitation would prevent potential market failures caused by the moral hazard problem (Miraldo, 2014a) which occurs when the patient behaves in a less careful way about his health knowing that they will not be charged for any particular condition that may occur in the future (Miraldo, 2014f). This poses the risk of having sicker population and increasing public health spending (Donaldson & Gerard, 1989). It would not be a moral behaviour to provide all services free of charge regardless of the condition. Spending funds on lung transplant for patients who continue to smoke, for example, would be unacceptable while the limited budget had to be allocated to other operations with more valid reasons. The moral hazard problem could also occur in the form of overuse of services both by users and providers as they would have no incentive to use the resources economically. The potential effect would be a big waste of human and capital resources as the same fund could enable those same resources to be used on more value-adding processes. According to (Donaldson & Gerard, 1989), using the resources in an area that is not funded (regarded as the opportunity cost) would have more benefits than using them to provide comprehensive health care. The Washington Post (Korobkin, 2014) reports that the U.S. Affordable Care Act is beneficial for users as it excludes fewer services from the benefit package (U.S. Department of Health & Human Services, n.d.), however, it could easily increase health care costs due to the potential moral hazard problem. It should also be considered that

the overuse of services could easily result in inequalities as part of the population would ask for more services without any real need thus prevent the poor from using the same particular service at the same time. This is supported by World Health Organization (2010) indicating that “governments also must be aware that free public services may be captured by the rich, who use them more than the poor, even though their need may be less” (p.16).

According to Geyman (2007), consumer-driven health care, being a recent trend, states that payment options such as deductibles or co-payments could be used to direct patients to make more responsible health choices. Successful constrained benefit packages in social insurance-based systems are exemplified by France who introduced co-payments as a mechanism to stagger demand (Miraldo, 2014c; Lancry & Sandier, 1999).

2.3. Discussion

Although an all-free system would fulfill governments’ duty of ensuring the wellbeing of citizens by promoting equity and financial protection, scope constraint would reduce the risk of unsustainability in the economy and enable the funds to be allocated to other publicly funded areas or to be used on more essential services. It would also buffer demand, prevent market failures and inequalities caused by the moral hazard problem. We know that every decision comes with an opportunity cost; a trade-off of many others. However, as Brock (2014) describes, in systems with unconstrained scope, governments would not be able to effectively carry out duties in all other public sectors; and this in turn would harm the overall wellbeing of citizens while putting much of the effort on health care. Therefore, there is a need for range constraints in health systems to ensure more sustainable economies and be able to allocate the resources on processes that would have more potential benefits. As supported by Wong & Bitran (1999), less critical services do not necessarily have to be financed by the government but can still be provided by the private sector.

3. Determining the Benefits Package

Deciding to limit the scope of services brings the question of how to determine which services to include and which services to leave out; to be paid by the user. Determining this basket which involves a limited number of services ('benefits package') requires making choices among all available health services, (a selection process) based on the level of satisfaction of a pre-defined criteria or objective (Wong & Bitran, 1999). This selection therefore entails prioritizing services over others (Tragakes & Vienonen, 1998). Effective prioritization can help achieve both equity and efficiency targets (Wong & Bitran, 1999) by enabling decision-makers to review the process anytime and see if the relative valuation of services is in accordance with the criteria.

3.1. The Decision-Making Process

An effective prioritization process requires fair methods in order to be implemented successfully. Therefore, it is a critical and sensitive issue since unfair process might be incorporated if it is not addressed carefully. This is exemplified by some denials of vital treatments for certain cancer types in the U.K. (Mitton & Donaldson, 2004; Smith, 2014).

Having explicitly-set methods allows maintain fairness in the system (Mitton & Donaldson, 2004). Explicit methods refer to clear and pre-defined ones while implicit methods are implemented without acknowledgement and are based on initiatives rather than rules (Coast & Owen-Smith, 2011). However, it is not without challenges to establish a system to set explicit priorities because individuals have different perceptions of fairness (Daniels, n.d.). Hence, who should make these decisions has also been a questionable issue in prioritization (Farrar et al, 2000).

A growing interest has been placed on the issue of including citizens in decision-making which certainly strengthens the perceived legitimacy of decisions. However, it is challenging as it is 'technically difficult and politically fraught' according to Robinson et al (2012), (p.2388). Decision-making about the benefits package has traditionally been the duty of various bureaucratic groups (government officials, health professionals, public representatives, government commissions (Mitton & Donaldson, 2004)) such as

the Ministry of Health (Miraldo, 2014d) and the National Institute for Health and Care Excellence (NICE) in the U.K. (Mitton & Donaldson, 2004), Health Services Commission in the state of Oregon (Herring, 2012), Ministers and the National Agency for Accreditation and Evaluation in Health Care (ANAES) in France (Bellanger, Cherilova & Paris, 2005) and regional health authorities in the provinces of Canada (Mitton & Donaldson, 2002). However, almost all systems incorporate public opinion as well as formal bodies as they are accountable towards the society. A well-known example is the state of Oregon where, in 1990s, the ranking process and services prioritized by the commissioners were criticised by the citizens and re-arranged by considering their valuations (Herring, 2012). During the same decade, the Department of Health in the U.K. recommended that opinions of various parties who had been using, providing and managing health care should be sought (Farrar et al, 2000), including the most important stakeholder: citizens. Nowadays, various techniques are being used in various countries to incorporate different views on the priority setting process. These include citizens' juries, opinion polls, focus groups and the willingness-to-pay method (Farrar et al, 2000) where public prioritizes different services by comparing them against each other and with potential costs such as paying higher taxes (Shackley & Ryan, 1995).

At the same time, besides being asked opinion, public should always be kept informed at all levels of decision-making to preserve legitimacy and strong accountability (Herring, 2012): which, decisions are taken, according to which criteria and evidence, the reasons for making that decision and many others (Klein, 1993). According to Mitton & Donaldson (2004), although it makes priority-setting rational, it is highly challenging as it requires transparency, in other words, open and accessible information which could be criticised, discussed and changed at all times. The reason is that the society and bureaucratic parties could together make decisions regarding certain criteria, however, when the big picture is seen, in fact it might be morally unacceptable or might necessitate further arrangements. To illustrate, Herring (2012) stated that “many people would not find it acceptable if the NHS funded cosmetic surgery but not cancer treatment, however open, accessible and open to review the system was” (p.79). Although there exists an sufficiently open decision-making system, decisions made should still be arguable, prioritization criteria should be reviewed continuously, questioned and criticised if needed, by all stakeholders, before and after decisions are implemented.

3.2. Tools

Although there exist a number of formal frameworks currently being used for prioritization purposes (University of Birmingham, 2014), there is no formal rule being followed as these frameworks are still being evaluated and developed (Mitton & Donaldson, 2003). Mostly used and mainly explicit priority-setting tools were drawn together based on literature review, and could be grouped in 5 categories: Needs Assessment, Core Services, Cost Analyses, Program Budgeting and Marginal Analysis and Technology Assessment.

3.2.1. Needs Assessment

Needs Assessment uses the needs of the citizens as a base to define a minimum benefits package. It is often used to set local health care priorities (Mitton & Donaldson, 2003), using community needs assessment reports which support the understanding of community needs by local health institutions (World Health Organization, 2001) such as Kaiser Permanente (Burdon & Clift, 2013) and Memorial Medical Center (Orange Coast Memorial Medical Center. 2013) and government bodies such as Centers for Disease Control and Prevention in the U.S. (Centers for Disease Control and Prevention, 2010).

Needs assessment is helpful in providing epidemiological information (Segal & Chen, 2001) and giving ideas about what citizens value over others and enable the information to be used to determine research priorities and set health system objectives (Mitton & Donaldson, 2003). This way it can support the efforts towards reducing inequalities in the health system (Mitton & Donaldson, 2003).

However, needs assessment does not consider the economic perspective comparing costs and benefits of the services that the public values (Mitton & Donaldson, 2003). Another drawback is that need is a subjective concept, is hard to define and is constantly changing. Therefore, needs assessment is not a preferable use for defining the benefits package.

3.2.2. Core Services

This tool aims to leave out some services that individuals should be responsible for, by defining a set of core services to be publicly funded according to prominence, as described by Maynard & Bloor, (1998) and cited by Mitton & Donaldson (2003).

It does not incorporate the economic perspective, as stated by Wordsworth, Donaldson & Scott (1996) and cited by Mitton & Donaldson (2003). Moreover, this approach is highly dependent on the people involved in discussions, just as the changing nature of need in needs assessment. Mitton & Donaldson (2003) also state that a person could have more benefits from a service which is not included in the benefits package, compared to another person benefiting less from a service which is included in the package; thus resulting in the overall benefit of the population to suffer and in unfair processes; which could harm equity and financial protection in the system.

3.2.3. Cost Analyses

These economic analysis tools compare alternative services against each other in terms of cost and benefit (Mitton & Donaldson, 2003) to understand if they are worth spending the resources on (Miraldo, 2014g). The difference of the three tools is that the effects (benefits) are measured differently in each. While costs are measured in monetary terms in the three, benefits are measured in monetary terms in Cost-Benefit Analysis, in number of life years gained or lost in Cost-Effectivity Analysis and in health-related quality of life (QALY) in Cost-Utility Analysis. Cost-Benefit Analysis comparing the costs and benefits in monetary terms is widely used in the NHS (Miraldo, 2014g).

The main advantage of these tools is the inclusion of public appraisal about health states and outcomes when calculating benefits of the interventions (Wong & Bitran, 1999). However, although they consider the economic perspective, they require considerable amount of time, effort (Mitton & Donaldson, 2003) and detailed information, the provision of which is usually inefficient, given scarce resources (Wong & Bitran, 1999).

3.2.4. Program Budgeting and Marginal Analysis

Program Budgeting and Marginal Analysis is a tool that has been used in many countries and regions over the past few decades (Mitton & Donaldson, 2003). It can be described as the maximization of impact of services on meeting the health needs (benefits) with limited resources as stated by Donaldson & Mooney (1991) and cited by Mitton & Donaldson (2003).

As summarized based on the descriptions of Segal & Chen (2001) and Mitton & Donaldson (2003), steps involved to carry out a Program Budgeting and Marginal Analysis are: defining areas to be examined, overlooking at the budget and how it is spent, identifying services that could be effective in the future, evaluating those services in terms of their cost and trying to shift the resources towards those services by decreasing the fund allocated to the ones who could still be provided with the same effectiveness level but with fewer resources.

This tool therefore incorporates economic analysis. However, as well as in cost analyses, need for data and effort involved is the main limitation of the Program Budgeting and Marginal Analysis framework (Mitton & Donaldson, 2003).

3.2.5. Technology Assessment

Not being a prioritization tool by itself (Korobkin, 2014), Technology Assessment in health care assists in priority-setting by assessing the effectiveness of new or already-used technologies under various conditions (Wong & Bitran, 1999) and their potential impact on patients, organization and the society (U.S. National Library of Medicine, 2014), with a comprehensive approach (The Danish Council of Ethics, 1997). The purpose to carry out technology assessments is to discover whether an existing technology is as effective as considered to be or to compare different technologies to each other (The Danish Council of Ethics, 1997) by using various tools such as know-how, research and clinical trials conducted (Wong & Bitran, 1999).

However, it does not consider the economic perspective of the technologies and does not involve public valuations (Wong & Bitran, 1999). Countries such as Sweden, the

Netherlands, France and U.K. are examples of health systems that have implemented technology assessments successfully (The Danish Council of Ethics, 1997; Oliver, Mossialos & Robinson, 2004).

3.3. Hybrid Approaches

Priorities are reflections of each society, thus they are highly affected by its values, culture and political structure (Mitton & Donaldson, 2003). Therefore each country uses a different combination of tools in a way that it fits with the goals and priorities of their own health system. Countries mentioned below exemplify the inclusion of explicit priority-setting tools in priority-setting; such as Cost Analyses, Technology Assessment and Needs Assessment.

In the U.K., since 1999, NICE has been making decisions on whether several services should be available on the NHS based on patients’ needs, priorities of the health system, the balance between benefits and costs and the potential impact on other NHS sources (Herring, 2012). The prioritized list in the State of Oregon set in the same decade was based on the ability to improve health, cost and perceived community value (Miraldo, 2014d). The new methodology that is started to be used in 2005 places focus on and prioritizes prevention and chronic diseases to shift focus from curation to prevention to develop a healthier population (Oregon Health Services Commission, 2009).

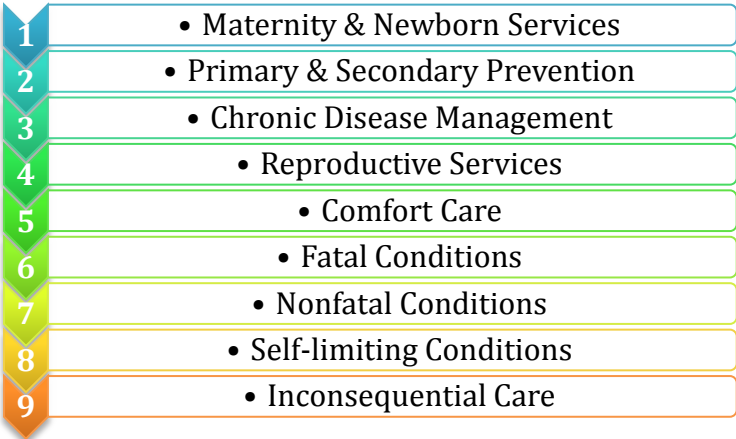


Figure 2: Rank order of Health Care Categories in the State of Oregon
(Oregon Health Services Commission, 2009:p:5)

679 services in total, which are grouped in 9 main categories (see Figure 2) are divided by the funding level line where given resources are no longer sufficient (see Figure 3) (Miraldo, 2014d; Oregon Health Services Commission, 2009). All Medicaid patients are entitled to user fees to be able to use the services below the funding level. (Oregon, n.d.).

```
Condition: CERVICITIS, ENDOCERVICITIS, HEMATOMA OF VULVA, AND NONINFLAMMATORY DISORDERS OF THE
           VAGINA
Treatment: MEDICAL AND SURGICAL TREATMENT
           Line: 501

Condition: CYSTS OF BARTHOLIN'S GLAND AND VULVA
Treatment: INCISION AND DRAINAGE, MEDICAL THERAPY
           Line: 502

----- Equivalent to Funding Level of 1/1/08

Condition: LICHEN PLANUS
Treatment: MEDICAL THERAPY
           Line: 503

Condition: DENTAL CONDITIONS (EG. BROKEN APPLIANCES)
Treatment: PERIODONTICS AND COMPLEX PROSTHETICS
           Line: 504
```

Figure 3: *Funding level in the State of Oregon*
(Oregon Health Services Commission, 2009:p:B40)

Priority-setting efforts initiated in the past few decades are exemplified further by Norway, who started to prioritize services in 1987 by taking into account the severity of condition together with the potential benefit and cost-effectiveness. Furthermore, the Netherlands initiated priority-setting efforts in 1990 by ranking services based on the level they satisfy need, benefit (potential effect) and efficiency (cost-effectiveness). Lastly, prioritization efforts started in Sweden in 1992 and focused on its core values: human dignity, need and efficiency. (Mitton & Donaldson, 2004).

3.4. Discussion

Although the time and effort required to conduct a Program Budgeting and Marginal Analysis is a potential disadvantage, it seems to be the most comprehensive tool among all, integrating most of the others. Particularly, considering that the initial starting point being 'scarce resources', it seems to fulfil the goal of enabling not only cost-effective but also 'strong enough' decisions to be made. Based on its implications in various countries, Mitton & Donaldson (2004) state that it is expected to be significantly effective as a decision-making tool. Therefore Program Budgeting and Marginal Analysis is suggested to be used in prioritization as the other tools fail to satisfy all criteria at the same time: consideration of the economic perspective, easy, timely and cost-effective implementation, incorporation of public views. However, although Program Budgeting and Marginal Analysis seems to be the most comprehensive, no single tool is adequate on its own at all times; therefore necessitates support by the advantages of other tools to optimize the decisions made (Wong & Bitran, 1999); as exemplified by the aforementioned priority-setting approach examples from different countries. The remaining tools can always provide valuable insights in different areas such as needs assessment providing epidemiologic and research-related insights and objectives to the health sector, cost analyses being useful in comparing the relative costs and benefits of different services and technology assessment helping discover if services are in fact beneficial or not and re-consider the whole process.

However, most importantly, when combining different tools, each country/state should consider the usage of the tools that are suitable to their context (Mitton & Donaldson, 2003) by keeping the efforts in seeking public opinion, whose prominence is expected by Robinson et al (2012) to increase even more in the future for priority-setting in health care.

4. Conclusion

To conclude, health systems should constrain the range of health services that are available to citizens free of charge. It is suggested to use the Program Budgeting and Marginal Analysis tool in combination with many others. To optimize decision-making process, public opinion should be sought, transparency and explicit methods should be aimed for, and possible outcomes should be considered at each step taken. Moreover, continuous reviews of the entailments and possible outcomes of each decision would help foresee their future impact on providers, physicians and the society.

Klein (1993) describes priority-setting as a never ending debate. It is critical for health systems decide on the processes that ensure a fit between 'which priorities are set' and 'what the society values'. However, values and perceptions of the society are ever-changing concepts, depending on the economy, demography and medical technology as supported by Klein (1993). To maintain that fit, flexibility should be at the heart of decision-making process of health systems, helping it adapt to ever-changing circumstances.

5. References

- Bellanger, M. M., Cherilova, V. & Paris, V. (2005) The “Health Benefit Basket” in France. *The European Journal of Health Economics*. [Online] 6 (1), 24-29. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1388081> [Accessed 28th August 2014].
- Bishop, E. L. (1928) Responsibility of government in public health work. *American Journal of Public Health and the Nation's Health*. [Online] 18 (6), 705-709. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1580734/pdf/amjphnation01142-0005b.pdf> [Accessed 25th August 2014].
- Brock, D. (2014) *Rationing: Why It is Ethical*. The Hastings Center. Weblog. [Online] Available from: <http://healthcarecostmonitor.thehastingscenter.org/danbrock/why-it-is-ethical/> [Accessed 25th August 2014].
- Burdon, R. & Clift, K. (2013) *Community Health Needs Assessment*. Kaiser Foundation Hospital – SUNNYSIDE. [Online] Available from: http://share.kaiserpermanente.org/wp-content/uploads/2013/09/Sunnyside-CHNA_2013.pdf [Accessed 27th August 2014].
- Butler, J. (1999) *The Ethics of Health Care Rationing*. Cassell.
- Centers for Disease Control and Prevention. (2010) *Building a foundation of knowledge to prioritize community needs: an action guide*. [Online] Available from: <http://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/tools/change/pdf/changeactionguide.pdf> [Accessed 29th August 2014].
- Chen, G. J. & Fieldman, S. R. (2000) Economic aspect of health care systems: advantage and disadvantage incentives in different systems. *Dermatologic Clinics*. [Online] 18 (2), 211-214. Available from: [http://www.derm.theclinics.com/article/S0733-8635\(05\)70165-0/abstract](http://www.derm.theclinics.com/article/S0733-8635(05)70165-0/abstract) [Accessed 27th August 2014].
- Coast, J. & Owen-Smith, A. (2011) *Rationing: should it be implicit or explicit?* University of Birmingham. [Online]. Available from: <https://www.imh.liu.se/halso-och-sjukvardsanalys/prioriteringscentrum/konferenser/nk2011/nk2011-dokumentation/1.295208/Dag2-ppenhet-CoastKompatibilitetslge.pdf> [Accessed 30th August 2014].
- Daniels, N. (n.d.) *Justice, health and health care*. Tufts University. [Online] Available from: http://www.hsph.harvard.edu/benchmark/ndaniels/pdf/justice_health.pdf [Accessed 28th August 2014].
- Daniels, N. (1985) *Just Health Care*. Cambridge, Cambridge University Press.
- Deloitte. (2014) *2014 Global health care outlook: shared challenges, shared opportunities*. [Online] Available from: <http://www2.deloitte.com/content/dam/Deloitte/dk/Documents/life-sciences-health-care/Global-health-care-2014.pdf> [Accessed 30th August 2014].

- Donaldson, C. & Gerard, K. (1989) Countering moral hazard in public and private health care systems: a review of recent evidence. *Journal of Social Policy*. [Online] 18 (2), 235-251. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/10303661> [Accessed 23rd August 2014].
- Donaldson, C. & Mooney, G. (1991) Needs assessment, priority setting, and contracts for health care: an economic view. *British Medical Journal* [Online] 303 (6816), 1529-1530. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1671822> [Accessed 1st September 2014].
- Farrar, S., Ryan, M., Ross, D. & Ludbrook, A. (2000) Using discrete choice modelling in priority-setting: an application to clinical service developments. *Social Science & Medicine*. [Online] 50 (1), 63-75. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/10622695> [Accessed 30th August 2014].
- Geyman, J. P. (2007) Moral hazard and consumer-driven health care: a fundamentally flawed concept. *International Journal of Health Services*. [Online] 37 (2), 333-351. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/17665727> [Accessed 30th August 2014].
- Glassman, A. & Chalkidou, K. (2012) *Priority-setting in health: building institutions for smarter public spending*. Center for Global Development. [Online] Available from: http://www.cgdev.org/files/1426240_file_priority_setting_global_health_FINAL.pdf [Accessed 30th August 2014].
- Gruber, J. (2011) The impacts of the Affordable Care Act: how reasonable are the projections? *National Tax Journal*. [Online] (64), 893-908. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/22692518> [Accessed 29th August 2014].
- Herring, J. (2012) *Medical Law and Ethics*. Oxford, Oxford University Press.
- Klein, R. (1993) Dimensions of rationing: who should do what? *British Medical Journal*. [Online] 307 (6899), 309-311. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1678573> [Accessed 28th August 2014].
- Korobkin, R. (2014) Health care costs and the “moral hazard” problem. *The Volokh Conspiracy. The Washington Post*. Weblog [Online] Available from: <http://www.washingtonpost.com/news/volokh-conspiracy/wp/2014/03/10/health-care-costs-and-the-moral-hazard-problem/> [Accessed 20th August 2014].
- Kutzin, J. (ed.), Cashin, C. (ed.) & Jakab, M. (ed.). (2010) *Implementing health financing reform: lessons from countries in transition*. The European Observatory on Health Systems and Policies and World Health Organization. [Online] Available from: http://www.euro.who.int/_data/assets/pdf_file/0014/120164/E94240.pdf [Accessed 25th August 2014].
- Lancry, P. J. & Sandier, S. (1999) Rationing health care in France. *Health Policy* [Online] 50 (1-2), 23-39. Available from: <http://www.sciencedirect.com.iclebzp1.cc.ic.ac.uk/science/article/pii/S0168851099000627?np=y> [Accessed 1st September 2014].

- Lock, D. (2014) Rationing NHS Care: Why We Need a Serious Debate. *The Guardian*. [Online] Available from: <http://www.theguardian.com/healthcare-network/2014/apr/04/rationing-nhs-care-debate-david-lock> [Accessed 28th August 2014].
- Maynard, A. & Bloor, K. (1998) *Our Certain Fate: Rationing in Health Care*. London, Office of Health Economics.
- Miraldo, M. (2014a) Health System, Policy and Financing 8. [Lecture] Imperial College London, 20th March.
- Miraldo, M. (2014b) Health System, Policy and Financing Lecture 5. [Lecture] Imperial College London, 11th March.
- Miraldo, M. (2014c) Health System, Policy and Financing Lecture 3. [Lecture] Imperial College London, 4th March.
- Miraldo, M. (2014d) Health System, Policy and Financing Lecture 2. [Lecture] Imperial College London, 27th February.
- Miraldo, M. (2014e) Health System, Policy and Financing Lecture 1. [Lecture] Imperial College London, 25th February.
- Miraldo, M. (2014f) Health Economics Lecture 5. [Lecture] Imperial College London, 10th February.
- Miraldo, M. (2014g) Health Economics Lecture 7. [Lecture] Imperial College London, 3rd February.
- Mitton, C. & Donaldson, C. (2004) Health care priority setting: principles, practice and challenges. *Cost Effectiveness and Resource Allocation*. [Online] 2: 3. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC411060/> [Accessed 25th August 2014].
- Mitton, C. & Donaldson, C. (2003) Tools of the trade: a comparative analysis of approaches to priority-setting in healthcare. *Health Services Management Research*. [Online] 16 (2), 96-105. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/12803949> [Accessed 25th August 2014].
- Mitton, C. & Donaldson, C. (2002) The “health benefit basket” in France. *Health Policy*. [Online] 60 (1), 39-58. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/11879944> [Accessed 27th August 2014].
- National Health Service. (2013) Common Health Questions: NHS Services and Treatments: Can I get it on the NHS?: When do I have to Pay for NHS Treatment? [Online] Available from: <http://www.nhs.uk/chq/Pages/888.aspx?CategoryID=68&SubCategoryID=154> [Accessed 30th August 2014].
- NHS Institute for Innovation and Improvement. (n.d.) QIPP: Establishing the Evidence. [Online] Available from: http://www.institute.nhs.uk/establishing_evidence/establishing_evidence/background.html [Accessed 23rd August 2014].

Obimbo, E. M. (2003) Primary health care, selective or comprehensive, which way to go? *East African Medical Journal*. [Online] 80 (1), 7-10. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/12755235> [Accessed 27th August 2014].

Oduncu, F. S. (2013) Priority-setting, rationing and cost-effectiveness in the German health system. *Medicine Health Care and Philosophy*. [Online] 16 (3), 327-339. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/22692518> [Accessed 29th August 2014].

Oliver, A., Mossialos, E. & Robinson, R. (2004) Health technology assessment and its influence on health-care priority setting. *International Journal of Technology Assessment in Health Care*. [Online] 20 (1), 1-10. Available from: <http://journals.cambridge.org.iclibezp1.cc.ic.ac.uk/action/displayFulltext?type=1&fid=216406&jid=THC&volumeId=20&issueId=01&aid=216404&bodyId=&membershipNumber=&societyETOCSession=> [Accessed 28th August 2014].

Orange Coast Memorial Medical Center. (2013) *Community Health Needs Assessment*. [Online] Available from: <http://www.memorialcare.org/sites/default/files/media/ocmmc-community-benefits-assesment-2013.pdf> [Accessed 29th August 2014].

Oregon. (n.d.) Department of Human Services: Medical Assistance. [Online] Available from: http://www.oregon.gov/DHS/spwpd/pages/hlth_med/healthmed.aspx [Accessed 30th August 2014].

Oregon Health Services Commission. (2009) *Prioritization of health services: a report to the governor and the 75th Oregon Legislative Agency*. [Online] Available from: <http://www.oregon.gov/oha/OHPR/HSC/docs/r/09hscbiennialreport.pdf> [Accessed 30th August 2014].

Patel, K. (2013) *Containing health care costs: recent progress and remaining challenges*. *Brookings*. Weblog [Online] Available from: <http://www.brookings.edu/research/testimony/2013/07/30-health-care-costs-patel> [Accessed 30th August 2014].

Perry, G. S., Presley-Cantrell, L. & Dhingra, S. (2010) Addressing Mental Health Promotion in Chronic Disease Prevention and Health Promotion. *American Journal of Public Health*. [Online] 100 (12), 2337-2339. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/20966358> [Accessed 25th August 2014].

Randle, A. & Kippin, H. (n.d.) *Managing demand: building future public services*. Royal Society for the encouragement of Arts, Manufactures and Commerce. [Online] Available from: http://www.thersa.org/_data/assets/pdf_file/0019/1540126/RSA_Managing-Demand_Revision4.pdf [Accessed 27th August 2014].

Rice, T., Rosenau, M., Unruh, L. Y., Barnes, A. J., Saltman, R. B. (ed.) & van Ginneken, E. (ed.) (2013) *United States of America: Health system review*. European Observatory on Health Systems and Policies. [Online] Available from: http://www.euro.who.int/_data/assets/pdf_file/0019/215155/HiT-United-States-of-America.pdf [Accessed 27th August 2014].

Robinson, S., Williams, I., Dickinson, H., Freeman, T. & Rumbold, B. (2012) Priority-setting and rationing in health care: evidence from the English experience. *Social Science*

- & *Medicine*. [Online] 75 (12), 2386-2392. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/23083894> [Accessed 29th August 2014].
- Segal, L. & Chen, Y. (2001) *Priority setting for health: a critique of alternative models*. Centre for Health Program Evaluation. [Online] Available from: <http://www.buseco.monash.edu.au/centres/che/pubs/rr22.pdf> [Accessed 29th August 2014].
- Shackley, P. & Ryan, M. (1995) Involving consumers in health care decision making. *Health Care Analysis*. [Online] 3 (3), 196-204. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/10151639> [Accessed 27th August 2014].
- Smith, R. (2014) "Revolutionary" Breast Cancer Drug Denied on NHS Over Cost. *Telegraph*. [Online] Available from: <http://www.telegraph.co.uk/health/healthnews/11018039/Revolutionary-breast-cancer-drug-denied-on-NHS-over-cost-Nice.html> [Accessed 30th August 2014].
- Teutsch, S. & Rechel, B. (2002) Ethics of resource allocation and rationing medical care in a time of fiscal restraint – US and Europe. *Public Health Reviews*. [Online] 34 (1). Available from: http://www.publichealthreviews.eu/upload/pdf_files/11/00_Teutsch.pdf [Accessed 30th August 2014].
- The Danish Council of Ethics. (1997) Priority-Setting in the Health Service. [Online] Available from: <http://etiskraad.dk/upload/publications-en/misc/priority-setting-in-health.htm#2> [Accessed 30th August 2014].
- The World Bank Group. (2013) DEP Home: DEP web: Learning Modules: Population Growth Rate [Online] Available from: <http://www.worldbank.org/depweb/english/modules/social/pgr/> [Accessed 25th August 2014].
- Tragakes, E. & Vienonen, M. (1998) *Key issues in rationing and priority setting for health care services*. World Health Organization Regional Office for Europe. [Online] Available from: [http://whqlibdoc.who.int/euro/1998-99/EUR_ICP_CARE_01_03_02\(A\).pdf](http://whqlibdoc.who.int/euro/1998-99/EUR_ICP_CARE_01_03_02(A).pdf) [Accessed 27th August 2014].
- U.S. Department of Health & Human Services. (n.d.) About the Law. [Online] Available from: <http://www.hhs.gov/healthcare/rights/index.html> [Accessed 30th August 2014].
- U.S. National Library of Medicine. (2014) HTA 101: II. Fundamental Concepts. [Online] Available from: <http://www.nlm.nih.gov/nichsr/hta101/ta10104.html> [Accessed 1st September July 2014].
- United Nations. (2012) *World population ageing 1950-2050*. [Online] Available from: http://www.un.org/esa/population/publications/worldageing19502050/pdf/8chapter_i.pdf [Accessed 25th August 2014].
- University of Birmingham. (2014) Schools: Social Policy: Departments: Health Services Management Centre: Areas of Work: Decision Making and Priority Setting in Health and Social Care. [Online] Available from: <http://www.birmingham.ac.uk/schools/social->

policy/departments/health-services-management-centre/work/priority-setting.aspx [Accessed 29th August 2014].

Wong, H. & Bitran, R. (1999) *Designing a benefits package*. World Bank Institute. [Online] Available from:
<http://info.worldbank.org/etools/docs/library/122031/bangkokCD/BangkokMarch05/Week1/4Thursday/S2ServiceDelivery/DesigningaBenefitPackage.pdf> [Accessed 30th August 2014].

Wordsworth, S., Donaldson, C. & Scott, A. (1996) *Can We Afford the NHS?* IPPR.

World Health Organization. (2010) *Executive Summary: Health systems financing: the path to universal coverage*. [Online] Available from:
http://www.who.int/whr/2010/10_summary_en.pdf?ua=1 [Accessed 23rd August 2014].

World Health Organization. (2001) *Community health needs assessment: an introductory guide for the family health nurse in Europe*. [Online] Available from:
http://www.euro.who.int/_data/assets/pdf_file/0018/102249/E73494.pdf [Accessed 23rd August 2014].