



A Three-Step Strategy To Approach The Public Benefit Basket In The Health-Care Systems Of Industrialized Nations

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Abstract

In all health-care systems of industrialized nations it is difficult to describe the appropriate volume of services to be provided to all members of society. In our article, we propose a three-step strategy to facilitate decision making about this volume. This concept is based on the distinction between health-care services that save lives and others which improve the quality of life. Services provided to avoid life-threatening conditions are summarized in the minimal benefit basket (MBB). The MBB is a virtual basket which describes the absolute minimum of health care essential for survival. This virtual basket can only be defined by scientific data. It cannot be expected that all members of a society will be content with this minimal package of health-care services. The public benefit basket (PBB) is, however, a real basket which describes the health-care services a society could actually provide its members.

Four evidence-based criteria were selected for inclusion of a particular service in the MBB. These criteria include the definition of the final goal of a particular service, the effectiveness with which this goal is attained, the validity of the report describing the goal attainment and, finally, the costs of the service. These criteria should represent a specific set of acceptable instructions guiding health-care policy. Once services which are essential for survival have been defined and included in the MBB, it may be easier to select and add optional services that improve the quality of life. Adding optional services to the predefined MBB will result in the package of health-care services, the PBB, which should be offered to all members of society. This procedure facilitates defining a PBB which is needed to make policy decisions in any society.

Background

Health is a basic good that affects or even determines a person's ability to participate in society. To foster equal opportunities, it is necessary to provide health care as a public good for people in need. Health care

is also a private good, as health can be protected individually, and there are considerable differences in the demand for health-care services. In every country, health-care resources are scarce, and the reduction of costs and the setting of priorities are constantly being discussed. Unfortunately, so far there exist no universal solutions to the common dilemmas involved. In an era of continuously increasing medical possibilities, public health-care systems face the challenge of defining the appropriate volume of health-care services. The definition of appropriateness is the most difficult step in defining any benefit basket. The volume of this benefit basket often initially approaches a maximum, as it is problematic to exclude any of the services already provided. The definition of the appropriate volume of the health-care system is based on expectations. This may explain why almost all members of a society think theirs is a rather restricted health-care system, although almost all available health-care services are provided in most industrial societies.

The aim of this paper is to offer a model which may help define the optimal health-care basket. This model should moderate unrealistic expectations by separating services which are life-saving from services which improve the quality of life. In our model, the life-saving services are summarized in a minimal benefit basket (MBB). The public benefit basket (PBB) which has to be defined individually by each country includes the MBB plus the services which are necessary to meet the respective expectations regarding quality of life.

Methods

First, a general literature search was conducted using combined keywords (basic benefit basket, minimum benefit basket, benefit basket, health-care basket, priority setting, health-care services, health priorities, Evidence-based Medicine, effectiveness, efficacy, validity and costs). The databases PubMed, Medline and PsychLit were included. We also searched in Google Scholar.

Second, interviews with international experts provided recommended publications in which the specific

actions of the priority setting and rationing from Norway, Sweden and the United Kingdom were described. The focus of the survey was to discover how decision makers arrive at rationing decisions and how priorities are set today, which players are influential, and which priority-setting tools are available to these players. These papers [3,7,8,9,10] contributed considerably to the description of systems in Sweden, Norway and the United Kingdom.

Third, we identified twelve publications describing priority-setting efforts in Germany [11,12,13,14,15,16,17,18,19,20,21,22]. These publications are summarized below.

Results

Literature search

Attempts to explicitly define the public benefit basket (PBB) have been published by several national and international groups. Examples from Norway, Germany, and the UK confirm that the problem is discussed at a political level, without providing specified definitions of the MBB. In principle, almost no benefits are excluded from a benefit basket, as it is always possible to find some evidence supporting almost any health-care service. The challenge is to differentiate what is evidence based from what is not.

Interviews with international experts

The Scandinavian countries and the United Kingdom proposed two different strategies to set health-care priorities. Norway and Sweden developed abstract principles to guide the prioritization of services, while the provided services are specifically declared in the UK. From the second half of the 1980s and continuing into the 1990s, policy makers in Scandinavian countries encouraged explicit debates about priority setting.

Norway was the first western country to develop national guidelines for priority setting in health care. The Norwegian government established the Lønning I (1987) and Lønning II (1997) Commissions to develop the principles for prioritization and discuss their implementation. The Commissions decided to apply four principles: severity of condition, possible effects of a treatment, reasonable cost-effectiveness, and the quality of the evidence (measured on a scale of 1 to 3). These principles were set up to justify the legitimacy of the derived decisions.

In 1992 Sweden convened the Parliamentary Priorities Commission and outlined three platform principles as a starting point for setting priorities: human dignity, need and solidarity, and cost-efficiency. The committee excluded discrimination based on age,

social characteristics, and economic status and recommended that measures of effectiveness established to quantify quality of life, such as quality adjusted life years (QALYs), should not be used. It identified several levels of priority, attaching major importance to treatment of life-threatening, acute diseases and severe chronic diseases, palliative terminal care, and treatment of diseases that reduce autonomy.

In 1999, the National Institute for Health and Clinical Excellence (NICE) was established in the United Kingdom to define concrete decisions and practices based on health-technology reviews, new clinical guidelines, and cost-benefit assessments.

Priority setting efforts in Germany

Many proposals for priority setting and rationing were made in Germany [11,12,13,14,15,16,17,18,19,20,21,22]. The published proposals have not been recognized by politicians yet. All proposals are based on the well-established assumption that the prioritization of services or restrictions in the benefit basket is required. The proposals follow two different approaches: first, the definition of theoretical criteria (medical, ethical, and economic) and second, specific allocation decisions (e.g. outsourcing of certain services on the grounds of high costs). The Advisory Council for Concerted Action in Health Care (Sachverständigenrat für die Konzertierte Aktion im Gesundheitswesen SVRKAiG) [18,19] and the Central Commission for the Observance of Ethical Principles in Medicine and Adjacent Areas (Zentrale Ethikkommission) at the Federal Medical Chamber (Bundesärztekammer ZEKo) [21] define criteria for prioritization of medical services. The proposal of the ZEKo is more extensive than that of

SVRKAiG and, in addition to content criteria (ethical, medical and economic) also defines formal criteria (e.g. transparency) and other criteria (such as waiting time, ability and willingness to participate). The proposed criteria and the models are similar to the Swedish model. All other concepts [11,12,13,14,15,16,17,20,22] indicate which specific services should be excluded. Based on the analysis of the published literature, we concluded that the criteria used to define the MBB have to meet two principle conditions: these criteria have to be accepted by politicians, and they have to apply to practical decisions. Concepts like human dignity or necessity may be accepted by politicians, but are probably too general at the practical level.

The proposed model

We developed a model that is based on the definition of two baskets, the MBB and the PBB. The MBB is

only a virtual basket and is defined to set the minimum volume of health-care services. The PBB corresponds to the real volume of health care that is actually provided in individual countries. The definition of the PBB can be approached based on the definition of the MBB.

Following the conceptual definitions of the two baskets, we defined four evidence-based criteria which qualify health-care services for inclusion in the MBB.

The first of the necessary criteria is a description of the outcome of an intervention. Health-care services will not qualify for the MBB when only the effects on the process or the structure of the intervention, but not the effect on the final outcome, is described. For example, a treatment which definitely improves the patient's compliance (i.e. it certainly improves the process of cure) will qualify for the MBB only if it can be demonstrated that the improved compliance will actually result in an improved outcome (e.g. an increased cure rate). Interventions which only influence the structure or the process, but not the expected outcome, cannot be considered for further evaluation.

The criterion of the validity of the scientific reports was derived from the concept of evidence-based medicine and is described in a previous paper.

The criterion of the efficacy of the intervention was also based on the principles of evidence-based medicine.

Finally, we included the costs of the investigated intervention as a qualifying criterion for inclusion in the MBB.

The criteria for including a service in the MBB or PBB are based either on evidence (MBB) or preference (PBB). In addition, the goals of services included in the MBB or PBB differ. The MBB includes life-saving services, while PBB includes services which improve the quality of life (Illustration 1).

Discussion

Although the intensive debates in several countries about priority setting in health care have not resulted in an acceptable definition of a minimal benefit package, several lessons can be learned from these discussions. The committees and commissions in these countries have suggested principles and strategies for health-care decisions which are rather abstract and may be too general for practical application.

As a first consequence, we concluded that the recommendations for priority setting have to be rather specific to be applicable to further decisions. Second,

we assume that small health-care budgets will be exhausted faster than large budgets and will trigger the discussion about prioritization sooner than large budgets. This may be one reason why the priority discussion started earlier in the UK, where 6.7% of the gross domestic product (GPD) is spent on health care, compared to Germany, where 11% of the GPD is spent on health care.

Third, the public is obviously willing to accept – to a certain degree – an increase in health-care expenditures rather than a reduction in health-care services. We believe that Germany and other countries are approaching the critical point at which the acceptance of increasing health-care expenditures equals the readiness to discuss prioritization of health-care services. As a starting point for a discussion about priority setting, solutions for three challenges have to be provided.

First, it is necessary to define criteria which can be used for priority setting. Second, based on the experience of scientists from many countries [23,24,26], it seems impossible to apply these criteria directly to the definition of the public health-care package which is provided to any member of a society. Third, we assume that the difficulties in defining this public benefit basket (PBB) can be reduced by a two-step approach. As a first step, services are defined which are essential for survival. This basket is called the minimal benefit basket (MBB). In a second step, this MBB can be supplemented by additional services to an acceptable (with regard to content and costs) public benefit basket (PBB). This separation of a minimal and a public benefit basket may fit the model that health is a public, as well as a private, good. Public goods have to be guaranteed for anybody, whereas private goods need not.

In our model, we defined several mandatory criteria for inclusion of health-care services into the minimum benefit basket. Only health-care services addressing the outcomes of health problems are considered because many services improve the structure or process, but not the outcome of the intervention (Illustration 2). In addition, we only used criteria that can be quantified, as it is difficult to prioritize without quantification. 'Human dignity' is a criterion that cannot be used for quantification because there is no scale to differentiate between high and low dignity. In contrast, the quantification of 'validity', 'effectiveness' and 'costs' is possible by applying generally-accepted recommendations which support decisions about high and low validity [28,29]. Effectiveness and costs can be also expressed in quantitative terms.

The availability of effectiveness data remains an unsolved problem. In many situations, efficacy (i.e.

health-care effects which are observed under ideal, but artificial conditions, like in a randomized trial) was selected instead of effectiveness because effectiveness data (observations under real-world conditions) were not yet available [30].

Examples are recent data on breast-cancer screening which imply that a large number of tumors (22 %) identified by mammography disappear spontaneously without treatment [31]. The increasing use of diagnostic-imaging procedures for headache has led to the discovery of considerably more aneurysms. It is known that the morbidity of both treatment methods, clipping and coiling of aneurysms, is about 8%, and mortality is about 4%. Published data [32,33,34,35] confirm that the morbidity and mortality rates of undiscovered and consequently untreated aneurysms may be lower than those of treated aneurysms. This example underlines the importance of real outcomes under everyday conditions.

The validity ("the extent to which any measuring instrument measures what it is intended to measure" [36]) is the most important quality indicator of scientific reports. Many health-care services which may be rather ineffective are provided because the validity of the data was not checked carefully [29]. Accepting and paying for potentially ineffective health-care services is one of the big financial hazards of the present health-care system that could, indeed, be controlled.

Although the costs of health care cannot be neglected, they comprise fewer risks than the validity and effectiveness of reports because costs are far more obvious than the validity and effectiveness of scientific reports. Unfortunately, costs are highly validated, whereas effectiveness is only barely, and validity is almost not taken into account at all. The four criteria, outcome, effectiveness, validity and costs, should be considered in any health-care system.

The conceptual distinction between two different baskets, the MBB and the PBB, will considerably reduce the volume of controversial services, as it discloses the possibility to use defined criteria – based either on evidence or preference – for the definition of the baskets. The definition of the MBB is based only on scientific criteria, but not on societal values, such as morality, tradition, justice, accountability and care. Therefore, it will not be too difficult to achieve a consensus on the MBB. The public benefit basket (PBB) will include the MBB and also services which cannot be selected based by scientific criteria. The selection of these additional criteria has to be based on societal values. Once the MBB has been defined, it can be argued that all possible services were included to avoid life-threatening conditions. Additional services will only be necessary to improve quality of life.

Although it can be expected that almost everybody will request some additional services and that the number of such requests will vary considerably, it should not be difficult to identify the minimum additional services which are requested by most members of the society. This minimum can be included in the PBB. Any additionally requested service could be covered by private health-care insurance.

The minimal benefit basket (MBB) is defined solely by scientific (i.e. epidemiologic or economic) evidence. This basket should be covered in every country, regardless of its gross national product or other indicators of wealth. It does not consider ethical aspects and, therefore, represents only a virtual basket. We recognize that other services which cannot be selected by scientific criteria, like the treatment of patients with multiple injuries (polytrauma), cannot be withheld. However, one has to be aware of the fact that financial resources are limited and resources that are spent for ethical reasons will no longer be available to solve other health-care problems. Economists describe this dilemma as opportunity costs. The real basket, the PBB, which is provided by the society, will include the additional minimum of services that improve the quality of life.

Conclusion(s)

In conclusion, we believe that the three steps presented above, the definition of scientific criteria, the distinction of two baskets and the effective reduction of the number of controversial criteria will facilitate defining a PBB. The three steps supplement each other and cannot be separated. It will hardly be possible to define a PBB on the basis of only one or two of these steps.

Abbreviation(s)

MBB: minimal benefit basket

PBB: public benefit basket

TBB: total benefit basket

Authors Contribution(s)

The concept of this paper was developed by FP, VM, MW and HF. All authors contributed ideas and references to confirm and refine the concept. The manuscript was prepared by FP and VM. All authors read and approved the final version of the manuscript.

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Illustrations

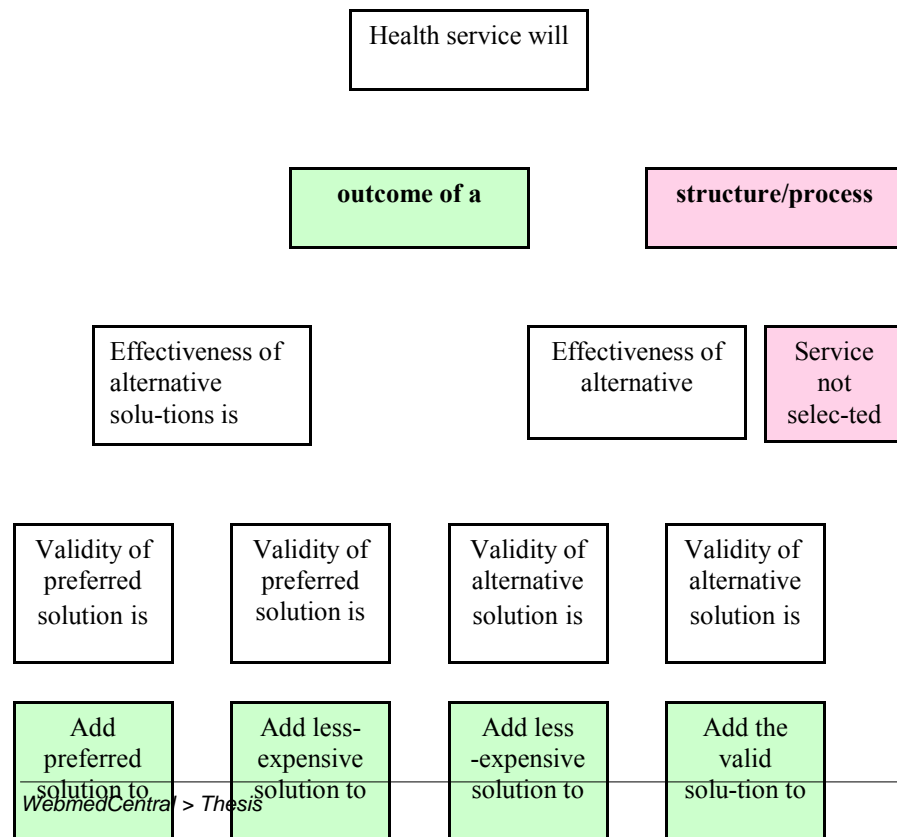
Illustration 1

Goals and inclusion criteria for MBB and PBB

	Minimal Benefit Basket (MBB)	Public Benefit Basket (PBB)
Goals	saving lives	improving quality of life
Inclusion criteria	evidence based	preference based

Illustration 2

Criteria for inclusion of health-care services into the minimal benefit basket



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