



EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS DIRECTORATE

Health Division

The HealthBASKET Project: comparison of international treatment costs

This document will be presented under item 3.3 of the draft agenda and has been prepared by Peter Smith - Centre for Health Economics, University of York, United Kingdom

Task Force for the Development of Health-Specific Purchasing Power Parities

To be held on 8 June 2007

Château de la Muette,
Room Roger Ockrent

Beginning at 9:30 a.m. on the first day

SIXTH FRAMEWORK PROGRAMME



Project no. **SP21-CT-2004-501588**

Project acronym ***Health*BASKET**

Project title **Health Benefits and Service Costs in Europe**

Instrument **Specific Targeted Research or Innovation Project**

Thematic Priority **Life Sciences, Genomics and Biotechnology for Health**

Deliverable 35 D35 – Final Synthesis Report

Due date of deliverable: 31st March 2007
Actual submission date: 29th March 2007

Start date of project: 1st April 2004

Duration: 36 Months

Lead contractor: Department of Healthcare Management, Berlin University of Technology

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level		
PU	Public	
PP	Restricted to other programme participants (including the Commission	X
RE	Restricted to a group specified by the consortium (including the Commission	
CO	Confidential, only for members of the consortium (including the Commission Services)	

HealthBASKET:

Final Synthesis Report and Policy Recommendations

HealthBASKET – Health Benefits and Service Costs in Europe – is a project funded by the European Commission within the Sixth Framework Research Programme (Grant: SP21-CT-2004-501588). The project began in April 2004 and was completed in March 2007. The project was directed by the European Health Management Association (EHMA). The scientific coordination of *HealthBASKET* was led by Prof. Reinhard Busse from the Department of Health Care Management at the Technische Universität Berlin.

Purpose and background

Since the Kohll/Decker judgments of the European Court of Justice, it has become increasingly clear that health services can no longer be regarded as operating in isolation from other EU Member States. Increasingly there are flows of patients from one Member State to another, sometimes as a matter of individual choice, sometimes organised through Ministries of Health or sickness funds.

There is, however, widespread agreement among Member States that the “financial balance” of national health systems within the European Union should not be undermined by the movement of patients.

A basic requirement to protect this financial viability is the availability of accurate information on the basket of services offered in the different Member States, how these are defined, how often they are used for particular patients, what their costs are and what prices are paid for them. This knowledge will enable both Member States and the European Commission to formulate coherent policies to order patient movements in a way which will not threaten the financial viability of existing health systems and the treasured principles of universality, equity and accessibility. Furthermore, if patients are to benefit from the opportunity offered by the European Union’s Internal Market, they too will need to know what services are available elsewhere, and at what cost.

Previously, health care costs comparisons were usually made at an aggregate level and variations identified at the macro level, e.g. in purchasing power parities per capita, as a percentage of GDP, distribution of expenditure per sector. This was due to the fact that analyses of costs of individual services – the micro-level – are difficult because of limitations on the comparability of data. If individual cost data are available, it has usually been unclear whether differences are due to

1. differences in the actual services delivered,
2. varying definitions of which cost categories are included in cost (or rather price) calculations or
3. actual differences in costs per service.

The first aspect concerns the underlying definition of “service” which may vary between (and within) countries. In this sense costs variations could either reflect differences in services delivered (e.g. regarding the use of expensive technologies) or simply the definition of services (e.g. whether anaesthesia is included in the service “surgical procedure” or counted separately). However, even for a comparable service, the second problem concerns the different factors which might be included in the costs calculations (e.g. whether investment costs are included). Again observed variations in costs would be explained through the way costs are calculated. The third important issue relates to the differences in input prices. This is particularly relevant for the prices of the workforce (e.g. doctor and nursing time).

Objectives of the project

The objectives of the *HealthBASKET* project have therefore been two-fold: to consider policy as well as methodological challenges. It has addressed both needs in a clear and unambiguous manner, by focusing specifically on the basket of services and by reviewing and developing methodologies to assess costs and prices of individual services across EU Member States. The project also supports a more coherent policy vision by developing and testing an innovative approach to the analysis of costs at the micro-level which will be internationally comparable, and by assessing cost variations between Member States using a selection of inpatient and outpatient services.

The project was conducted in the policy-oriented research area within the EU's 6th Framework Research Programme with the intention *"to support the formulation and implementation of Community policies, by providing scientific contributions to policies that are targeted precisely on needs ("demand-driven"), coherent across the various Community policy areas, and sensitive to changes in policy as they take place."* More specifically, Priority 2 of that research area (*"Providing health, security and opportunity to the people of Europe"*) focused, inter alia, on *"the formulation of a more coherent overall policy vision with a clear evidence base [...] to respond to the new challenges for enlargement and to find effective responses to issues related to [...] the increasing mobility of patients [...] and services"*. Research was needed to *"deepen understanding and enhance the scientific base for policy on [...] developments in European health and care services"*. Specifically, the project was developed in order to address Task 3 *"Comparing Member States' health costs at individual service level"* which was defined as *"to identify possible methodologies for comparing costs of services, and to scope the possibility of the future development of detailed systems of health cost auditing and accounting in order to move towards better cost-effective health care systems"*.

The project has approached these issues in a descriptive and analytical way for a sample of 9 Member States representing the various types of healthcare systems (Denmark, France, Germany, Hungary, Italy, Poland, Spain, United Kingdom and The Netherlands). In addition a second axis of research has focused on transnational comparability issues.

Country and cross-country analyses

The project partners in each of these 9 countries have:

- collected and described the definitions of the services provided within the system and analysed the structure and the contents of the benefit "baskets" (and, if existing, the "catalogues" in which the baskets are operationalised) as well as the process of defining these benefit baskets and catalogues;
- explored the possibilities of building a European taxonomy of benefits, based on that analysis and other relevant classifications, to enable a common language for cost comparisons (Phase I);
- reviewed methodologies used to assess costs and prices of services included in the baskets across countries and attempted to identify 'best practice' in the analysis of costs at the micro-level with the aim of ensuring international comparability (Phase II);
- assessed variation in resource consumption (human resources, goods, capital etc.) and actual costs of these resources for individual health services between and within countries,

using a selection of 10 “case-vignettes” representing need for care in both inpatient and out-patient settings (Phase III).

A key aim of the study has been to identify which data are required in order to engage in meaningful international comparisons.

The research has involved policy-makers through workshops, and regular reporting of interim results to policy-makers. In addition, an Advisory Board with representation of WHO, the European Observatory on Health Systems and Policies, OECD, as well as provider organisations was established in order to ensure that the potential impact on standards development as well as on healthcare development in the EU can be turned into actual impact.

The three project phases

It is beyond the scope of this executive summary to review methodology, findings and conclusions of the three project phases in depth. Comprehensive reports and publications have been made available as follows:

- Methodology, country reports and a comparative article on **Phase I**, i.e. the description and analysis of the benefit baskets, the criteria used to determine them etc., are available on the project website www.healthbasket.org. Country reports focusing on inpatient care were published in December 2005 as supplement 1 of the *European Journal of Health Economics*, volume 6, freely available in the internet (<http://www.springerlink.com/content/t2466855k020/?p=a9dbff4fee024bda8b82350033786e4e&pi=11>). An edited version of the comparative article is attached as Annex 1.
- Methodology and country reports of **Phase II**, i.e. the analysis of the methods used to assess costs and prices, as well as a literature review on “best practice” of international cost assessments are available on the project website www.healthbasket.org. Edited country reports focusing on inpatient care were published in August 2006 in a special issue (vol. 9, no. 3) of *Health Care Management Science* (<http://www.springerlink.com/content/v162x3264175/?p=e9b20c7cfc724abab9d866a0d76f5596&pi=2>).
- Methodology, country reports and a comparative analysis of **Phase III**, i.e. the within- and across-country comparison of resource consumption and costs for the 10 selected episodes of care, are available on the project website www.healthbasket.org. Articles on the specific methodology as well as comparative articles on the results of the case vignettes across countries will be published in a supplement of *Health Economics* at the end of 2007.

In the following sections the key points of each project phases are briefly summarized. Relevant recommendations from all three phases follow in the final section of this executive summary.

Phase I: Benefit baskets and decision-criteria

Methodology

Definitions: The project defined “Benefit basket” (also: “benefit package”) as the total of explicitly or implicitly catalogues/ lists/ service groups of health services and goods covered under public/ statutory schemes. The terms “*benefit catalogue*” or “lists” are reserved to sub-components of baskets if they differ by determining actors, taxonomy etc. In relation to the boundary of “health” services and goods (vs. for example “social” services or vs. general public activities with relevance to health), the project follows the delineation used in the Health Accounts of OECD (i.e. functional categories HC.1 to HC.6 with their respective sub-categories, cf. Table).

HC	Functional Classification
	<i>Personal Health Care Services and goods</i>
1	Services of curative care
2	Services of rehabilitative care
3	Services of long-term nursing care
4	Ancillary services to health care
5	Medical goods dispensed to out-patients
	<i>Collective health care services</i>
6	Prevention and public health services

Country case studies were developed around the following blocks of topics each addressing a set of research questions:

- **Overview on benefit basket in country:** At which level are entitlements to which service groups of health services/ goods regulated? For how many different sectors of health care (and/ or how many regions and/ or how many statutory schemes) do different regulatory regimes exist? What is the role of the central government in cases of delegation/ devolution to local and/ or self-regulating actors (e.g. whether pure supervision of process, formal approval of result, or need to transform into governmental decree or similar)? What types of benefit categories are excluded (esp. around the edges, e.g. physiotherapy, psychotherapy, dental care, rehabilitation)?
- **Definitions of entitlements and benefits by sector:** Who are the actors responsible for defining benefits for each sector and what is their respective role? Are the benefits defined explicitly (i.e. existing in a written form), implicitly (i.e. based on tradition) or as mixture of both? Is the definition of benefits specific or rather vague? Are they defined in a positive or a negative way (i.e. listing the included or excluded services)? Are the included benefits simple enumerations of procedures or goods or are they linked to patients’ conditions/ indications? How are benefits classified, i.e. itemised by service delivered (as is often the case in ambulatory care in social health insurance system but also in case of pharmaceuticals) or individual good (e.g. for pharmaceuticals), case-based per time-period (“all necessary services”, e.g. in primary care), case-based per diagnosis etc., per provider per time period? Are definitions uniform for all payers? If not, is there a certain core that is uniform for all payers? How and by whom is that defined? If benefit catalogues vary, for which entities (e.g. regions, sickness funds) and how many of them are there?

- **Description of benefit catalogues, actors involved and decision criteria:** How are benefits classified, i.e. itemised by service delivered (as is often the case in ambulatory care in social health insurance system) or individual good (e.g. for pharmaceuticals), case-based per time-period (“all necessary services”, e.g. in primary care), case-based per diagnosis etc., per provider per time period? “Taxonomy” of the benefit catalogue in respect to the following: 1. how many levels, i.e. chapters, sub-chapters, individual items, 2. logic used to define each level, usage of an existing nomenclature, restrictions of services by type or specific qualification of provider, age or disease of patient. Who made the decision about the general structure of the catalogue? Who determines the benefits listed in that catalogue? Who is responsible for the priority-setting regarding potential benefits? How do these committees decide? Must/ can/ do the decision-makers rely on outside expertise (e.g. by HTA institutions)? How much is based on evidence? What decision options exist (i.e. only “yes”/ “no” or limits to certain geographical entities or providers, patients, time periods, co-payment level)? What criteria are used when deciding about an in-/ exclusion of benefits (e.g. need, effectiveness, costs, cost-effectiveness, overall budget)? How is the relative weight given to the criteria? Are the criteria made public? How are decisions made public? Can such decisions be challenged in court? Are decisions re-evaluated regularly?
- **Discussion** Does the benefit package mean anything or does it exist only on paper and providers act more liberally (i.e. providing benefits which are not covered) or more restrictively? What are the transaction costs of benefit catalogues? Is there national awareness and discussion about benefit basket/ catalogues? Are there recent reforms and what are likely future developments?

Results and conclusions

To our knowledge, the *HealthBASKET* project has provided the first in-depth analysis of the benefit baskets and the benefit catalogues in nine European countries, representing a heterogeneous mix of health care systems. The country studies have shown that information on this issue is often difficult to access, since it is highly fragmented and non-systematic. The use of a common framework and terminology to scan the different health systems in searching for benefit catalogues has allowed us to gather heterogeneous information in a highly comparative manner. The methodology followed in our study could be applied to explore and describe the health baskets and catalogues in other European (as well as non-European) countries.

The comparative analysis of health benefits in the countries under study reveals that, despite their differences in the financial and organisational arrangements, there is a clear trend towards a more explicit definition of benefit baskets and benefit catalogues in European health care systems. Those countries which have recently introduced new health care legislation have more explicitly defined benefit catalogues. Other countries with older health care legislation have, at least at the legal level, rather more implicitly defined benefit baskets. However, as of now, no country has one uniform catalogue – benefit baskets consist of a mixture of differently defined lists (entitlements, payment, guidelines ...).

Even though country approaches to benefit definition vary greatly, only minor variations exist between countries if benefit entitlements are analysed by category: Most countries exclude similar benefits: cosmetic surgery, vaccination for travelling purposes) and certain non-conventional treatments (e.g. acupuncture). Since the *taxonomy* applied to sort and describe health services (and to a lesser degree, goods) differs widely from country to country – even if most tend to sort

ambulatory care primarily by physician specialty and inpatient care primarily by diagnosis and procedure – it remains somewhat unclear whether entitled services are actually the “same”. In contrast with this lack of clarity, clinicians seem to have a relatively uniform understanding of what constitutes “medicine” across different countries.

Contrary to widespread opinion, the motivation to establish an explicit benefit basket of services is not always cost-containment or rationing. In the two countries with a regionalized NHS, the purpose of the definition of a health basket is to assure equity among the regions. The devolution of health services to the autonomous (regional) governments made evident the need to define a minimum basket of health services common to all in order to avoid unacceptable differences in health service provision. The regional health authorities are however allowed to add further benefits, provided that they have adequately covered the minimum.

In most of the countries, the aspects considered in the decision-making process and the ultimate reasons underlying decisions on the health basket are not transparently and systematically documented. Explicitly defined benefit catalogues, however, require clear and transparent decision criteria for the inclusion or exclusion of benefits. This has been recognized by policy makers, as shown by the fact that sets of criteria to guide decision-making have been mentioned. Most countries officially state that (cost)-effectiveness is an important decision criterion. However, further inquiries often demonstrate that a true formalisation of the process is still lacking for many health care categories and is often restricted to one or few sectors of the health care system, e.g. pharmaceuticals or medical devices, and not generalisable to all products or services. Transparency is still lacking concerning the interpretation, operationalisation and application of the criteria in the process of decision-making.

Phase II: Cost calculations

Methodology

Phase II consisted of two parts. First a **systematic review** of the scientific literature on methodologies for calculating costs was conducted with the aim of identifying “best practice”.

Second, **country case studies** were developed around the following blocks of topics and research questions:

- ***Are there official prices or tariffs?*** What are the main characteristics of price regulation in health care, structured by health-care sectors? What is the unit for payment (i.e. level of aggregation)? At what level are prices set or negotiated? Is it possible for a provider to get different prices/payments from different purchasers (health authorities/ sickness funds/ governments)? Is it possible for a purchaser to pay different prices to different providers? What actors are involved in setting prices? Do prices vary depending on non- economic factors such as, for example, sanctions for exceeding amount of services agreed, etc.? If yes, how relevant are such factors?
- ***How are prices updated?*** Are there fixed update periods (yearly, bi-yearly, etc.)? Do providers or purchasers have the possibility to request update of prices? How accurately are updates done? What is the major drive behind price upgrades?
- ***How are costs of services established in the participant countries?*** What units are used to quantify resource consumption? What sources are used to assess resource

consumption? What sources are used to establish unit monetary value? How accurate are cost assessments? Which actors perform and/or use cost assessment?

Results and conclusions

Tariff systems are gaining importance; while they have been common in social health insurance-type countries for a long time, they are now increasingly used in tax-funded systems as well. By now, most countries have already installed performance-based remuneration schemes for inpatient and outpatient services, while they are often lacking for long-term care, rehabilitation and other types of services. As the underlying taxonomy to classify services differs greatly between countries (cf. phase I), prices cannot be compared across countries in any meaningful way.

There is a clear trend towards the use of micro-costing data (especially for inpatient services) to determine remuneration rates, reflecting the real costs of providers. The problem encountered by many, if not all countries, is the limited quality of data delivered by providers. This problem also represented a challenge for our study. There is a general trend in EU countries to develop DRG systems (based on “diagnosis-related groups”) for reimbursement purposes. While almost all of these systems have their origin in the system developed 30 years ago in Yale, the actual adaptation differs greatly between European countries. DRG introduction in Europe was uncoordinated and therefore learning opportunities (at least intra-European) were lost as European countries looked to non-European countries (e.g. Germany to Australia) instead of to its neighbours.

The review revealed that there is no universally accepted costing methodology. There are several appropriate methods to estimate the (unit) costs of a particular service. In general, accountants define costs in terms of the historical value of economic resources, while economists use a different concept of costs, frequently described as opportunity cost. Both accountant and economic literature agree on the basic principles of costing. Costing exercise starts with the (a) formation of a well-defined decision problem, including the objectives of costing, the perspective of costing, and the time horizon, as well as (b) the description of a particular service (cost object). Once a service has been defined in detail, the methodologies for its costing follow three distinctive steps: (c) the identification of resources used to deliver the service, (d) the measurement of resource utilization in natural units, and (e) attaching monetary value to resource use. In addition, there is a consensus on the need to address the robustness of the results by means of sensitivity analysis and statistical tests.

There is also consensus about the fundamental principles of cost allocation. Ideally, costs should be traced directly (i.e. allocated to the particular patient or case) if it is possible in an economically feasible way. Indirect costs (overheads) should be allocated to service areas based on actual utilisation or cause-and-effect bases. However, this may require a complex information system and additional resources. In practice, costing studies use five general ways to value resources: (a) direct measurement of costs, (b) cost accounting methods, (c) standard unit costs, (d) fees, charges and/or market prices, and (e) estimates/extrapolations. All have their advantages and disadvantages.

There is a trade-off between cost information accuracy and the costs of obtaining such cost information. Consequently, analysts, decision-makers and policymakers should consider whether the benefits of more accurate and detailed cost information justify the additional expenditures incurred to obtain that information.

The recommendations given in current methodological guidelines vary – partly due to noncompliance with fundamental economic and accounting concepts. For instance, guidelines disagree on (a) the best way to attach monetary value to resource use, including fixed assets, (b) the recommended perspective of the study (i.e. whether societal – taking costs of all payers into account – or whether focusing on third-party payers) (c) the appropriate measurement and valuation method of informal caregiver time, (d) the measurement and valuation of productivity loss, and/or (e) the costs incurred in added years of life. Furthermore, there is no consensus in the literature on the best technique to use in practice to allocate all support centres’ costs to mission centres (i.e. those where the patients are treated and which usually get the reimbursement). Likewise, the literature disagrees on the most appropriate way to deal with uncertainties.

The current guidelines do not provide enough details about the best way to select providers (sites) for cost comparison and how to deal with missing data. Current experience shows that a top-down approach could be useful and reasonably accurate in those cases where marketed health technologies (pharmaceuticals, medical devices and other consumables) are responsible for most of the resource use. In these cases, a bottom-up approach (microcosting) may yield very similar results, although these will be more expensive and time consuming. On the other hand, a bottom-up approach could be more accurate in those cases where service provision is based on complex organisational arrangements (input mix could vary significantly), and where human resource costs and overheads are responsible for a large proportion of the total costs.

Phase III: Empirical analysis of costs and international comparison

Methodology

The objectives of this phase were to:

- identify and develop a methodology for cost comparison
- assess whether prices are a good estimate of the costs of individual services
- explore the reasons underlying variations in the costs of individual services

In accordance with the project plan, 10 “needs for care” / “contact reasons” which lead patients to seek care were selected. The case-vignettes depicted “typical patients” including age, gender, and relevant co-morbidity. Vignettes were developed for both in-patient and out-patient, primary and secondary, elective and emergency settings. A questionnaire was developed, to allow accurate documentation of the services that a patient similar to the one described in the vignette would have/ has received as well as the costs associated with the services provided.

Box: Overview of the ten vignettes

Vignette 1	appendectomy; male aged 14-25; inpatient; emergency
Vignette 2	normal delivery; female aged 25-34; inpatient; elective
Vignette 3	hip replacement; female aged 65-75; inpatient; elective
Vignette 4	cataract; male aged 70-75; outpatient; elective
Vignette 5	stroke; female aged 60-70; inpatient; emergency
Vignette 6	acute myocardial infarction; male aged 50-60; inpatient; emergency
Vignette 7	cough; male aged ~2; outpatient; emergency
Vignette 8	colonoscopy; male aged 55-70; outpatient; elective
Vignette 9	tooth filling; child aged ~12; outpatient; emergency
Vignette 10	physiotherapy; male aged 25-35; outpatient; elective

For each country, data were collected for a sample of at least five representative health care providers in each setting relevant to the case-vignettes (i.e. at least 5 hospitals, 5 GPs, etc.). In relation to case-vignettes for inpatient settings, atypical providers, with cost structures that would be expected to differ from those normally providing the service (e.g. tertiary care hospitals if the service is provided mainly in general hospitals), were to be excluded from the sample. Partners were advised to use 'general acute hospitals' with around 200 to 400 beds, unless this did not reflect the real service organisation.

Results and conclusions

The methodology developed – i.e. using “case vignettes” – proved to be feasible and well-accepted, leading to realistic and valid results. As the approach is not built on actual but virtual “standardised” patients, it is sensitive to differences in treatment patterns and can be used for cross-provider and cross-country comparisons. The researchers experienced considerable understanding and willingness to participate from clinicians as well as from accountants who were generally able to provide estimates for most activities. The method chosen represents a good triangulation between qualitative and quantitative methods and constitutes an efficient approach both for European collaborative projects as well as within-country comparisons.

The approach has however some methodological limitations. First, it is a fact that simple vignettes do not accurately reflect clinical reality. The relatively small samples of both providers and patients recruited, lead consequently to large confidence intervals for the estimates in some countries. Countries, and providers within countries, differed in their ability to provide data according to the required methodology. Two principal structural differences between countries were identified: hospital providers in some countries do not own their assets, or international accounting standards regarding the cost of capital have not been fully implemented. Administrative differences between countries included: legal barriers to accessing patient data (especially in the UK); variation in the willingness to disclose data; variation in the quality of information systems between countries and providers; variation in the number of providers contributing data to each vignette in each country and the numbers of patients sampled by each provider; differences in the accounting rules used to allocate indirect and overhead costs to services.

The exploratory analysis (the final analysis will be available with the published articles) of the correlation between prices (reimbursement) and costs showed that for *normal delivery*, *stroke* and *colonoscopy*, prices and costs match fairly well on average, though there are outliers. For *appendectomy*, *hip replacement*, *cataract* and *AMI*, prices are on average higher than costs which may very well be due to the fact that the case vignettes were built around patients with no complications. For *tooth filling* prices seem on average to be lower than costs. There were insufficient data to allow a comparison of costs and prices for cough and physiotherapy.

The comparison of cost components by vignette found that for most vignettes, the total cost of care in Hungary, Poland and Spain was below the 9-country average. Differences in staff costs appeared to explain international variations for the *cough* and *tooth filling* vignettes, with differences in treatment setting appearing important for *colonoscopy* and possibly *stroke*. Overheads as a proportion of total cost varied widely both between countries and between vignettes. Length of inpatient stay was a significant factor associated with differences in costs between hospitals only in the *stroke* vignette.

Overall, while differences in average costs were significant between countries, within-country variation was also unexpectedly large – in some cases, larger than between-country variation.

These differences are partly due to different accountancy standards, but also due to prices per input unit and, most importantly, due to large and apparently real differences in practice (and therefore differences in actual coverage of services). Other explaining factors include data recording, cost-shifting to patients, exchange rates, demarcation of service to other sectors etc.

Main findings and recommendations

1. International comparison is an important tool for learning from each other and developing best practice. However, service, cost and quality data are currently not routinely available for such comparisons.
2. In the past, the benefit baskets of the EU Member States have received insufficient attention. All countries should be explicit about what they provide and what not, and should make such information available.
3. A thorough analysis of which goods and services are available (and under what conditions, including access hurdles, and at what costs) is essential for the Commission, national and regional governments, health care purchasers as well as patients. It is therefore recommended that the (basic) packages and criteria used to define them should be analysed, compared and discussed on a regular basis. Such a monitoring of benefit packages will enable a continuous flow of information e.g. on whether new technologies are available in the various countries.
4. This requires that public documents should be regularly prepared by each Member State giving a transparent overview of the health baskets and the decision-making criteria. A common “language” (or taxonomy: “European Classification of Health Services”) to explore and describe differences – whether justified by preferences, values, tradition, differences in providers or otherwise – is however urgently needed for both practical and scientific purposes. Its development should appear on the European agenda in the near future. The taxonomy could possibly be developed as an expansion of OECD classification; the usefulness of EN 1828 on coding systems in health care and EN 1068 on surgical procedures coding systems should be explored.
5. In the mid to long-term future, the adoption of common standards to determine inclusion of benefits in the baskets of the EU countries and possibly construction of a uniform European benefit basket (possibly initially restricted to certain indications with a clear European value-added, such as Orphan diseases) should appear on the European agenda. Policy-makers are well-advised to anticipate such discussions.
6. As countries are increasingly interested in cost-effectiveness/ value for money considerations, they need solid data, both on the cost as well as on the effectiveness side. The cost side, in particular, has been neglected in the past (compared to measuring outcomes) and a comparable methodology is currently not available.
7. Our approach of using standardised case vignettes to explore resource use as well as costs proved to be feasible. It overcomes many of the methodological difficulties encountered by other approaches. In the near future, the system of case vignettes should be further explored. Such an exploration should include an extension to trans-sectoral episodes of care (e.g. acute care and rehabilitation), episodes of chronic care (such as in Disease Management Programmes), mental illnesses, as well as methodological issues

such as making the allocation of overhead costs more comparable or constructing health care-specific purchasing power parities.

8. The prerequisite for international cost comparison is mutually accepted methodological guidance (standard costing method) and reasonably good compliance with it. However, consensus on the basic scientific principles will not be sufficient to ensure meaningful comparability. It is important to standardise the most important and frequently used methods/techniques such as resource use measurement, cost allocation methods, including allocation base and allocation techniques, and valuation methods, as well as capacity utilisation. In addition, the common guidelines should provide detailed instructions on how to use these instruments in practice.
9. The harmonisation of costing methodologies is essential, but not sufficient to ensure meaningful comparability. Rather, accounting systems both at provider level and at national level should be coordinated and standardised. This, however, raises a serious dilemma: A standardised “European” accounting methodology in health care down to provider level might be well-justified and “necessary” but enforcing a single methodology conflicts with with the principle of subsidiarity (as standards always do). This is, possibly paradoxically, due to the fact that more decentralised political regulation and operational management systems require more uniform data.
10. The *HealthBASKET* project partners recommend that the following option to overcome such a dilemma should be explored: to establish a volunteer “Benchmarking club” of hospitals which will agree on common accounting standards. While this option has many advantages (e.g. exerting pressure on non-participating hospitals to join), its methodological limitations must also be understood; e.g. such hospitals will probably not be representative for all hospitals in their respective region.
11. Once such comparative data are available, European countries need to revisit their common assumption that their respective health systems work so differently that all different regulation and financing systems are justified. The *HealthBASKET* project suggests that intra-country variation may be larger and more significant for many indications than inter-country variation. This in turn raises the question that pan-European quality assurance and pan-European patient classification systems (e.g. a Euro-DRG system) might need to be explored.

Future work

While the project partners have achieved the objectives stated by the EU and themselves, it is clear that further work in this area remains to be done. This relates to:

- the development of a “European Classification of Health Services”;
- an extension (of the description and analysis of the benefit baskets as well as the costs and prices used) to the other EU countries,
- continuous updates of the findings (both of which could be pursued under the auspices of the Commission), and

- a more thorough analysis of European DRG systems as well as the catalogues used in outpatient care etc. with the aim of further exploring opportunities for mutual learning and collaboration..

www.healthbasket.org