

# **DEVELOPMENT OF HEALTH-SPECIFIC PURCHASING POWER PARITIES:**

**General principles and problems in measurement of health  
services across countries**

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# *Introduction*

1. Why the development of health-specific PPPs is considered to be important.
2. Current practice in the compilation of PPPs for health care.
3. A review of the current challenges in the development of health-specific PPPs.
4. Issues to be addressed in the development of health-specific PPPs.

# PPPs

- PPPs are based on price ratios of the same products in different countries and in principle when they are used to divide expenditures on health, the differences in price levels between countries are removed and expenditures can be compared in real terms.
- Calculating PPPs is a complex matter: based on surveys to ascertain prices for a representative sample of comparable products in each country. The main difficulty lies in the choice of products as they must be both comparable and representative. This is difficult as products and their relative importance may differ from one country to another.

# *1. Why the development of health specific PPPs is important*

- Health-specific PPPs are produced in order to compare output and consumption expenditure on health among different countries for a given year.
- Health expenditures are probably the most commonly used single indicator of comparative policy analysis in the health sector.
- Simple expenditure comparisons do not take into consideration issues such as higher prices and wages in one country compared with another or differences in productivity between health sectors.

## 2. *Current practice*

- **Health goods:**

- Pharmaceutical products
- Other medical products
- Therapeutic appliances and equipment.

*PPPs are based on price surveys.*

- **Outpatient health services:**

- Medical services (physicians etc.)
- Dental services
- Paramedical services

*PPPs are based on price surveys but the comparability of data is often susceptible mainly because prices are intended to be “full” market prices including government reimbursements. Such data are not always easily available.*

## 2. *Current practice*

- **Hospital services (market and non-market)**
  - No prices are collected but an input-price approach is applied where PPPs for service outputs are derived from PPPs for input components of service production.
  - For compensation of employees, PPPs are based on the comparison of wages in different countries (three categories of employees: physicians, nurses and other medical staff, non-medical staff).
  - For intermediate consumption, PPPs for medical products in the household consumption are directly used as proxies. For non-medical intermediate consumption a more general PPP is used.
  - Main problems in the estimation:
    - Productivity assumed to be the same for all countries.
    - PPPs for intermediate consumption are not reliable because prices paid by households for medical and other goods are very different from prices paid by hospitals.
    - Many countries cannot provide expenditure data by required classification and other countries' weight structures have to be used to fill gaps when necessary.

## 2. *Current practice*

- As a result of many difficulties in the estimation, PPPs for health care are not widely used when comparing the volume of health services between countries although those PPPs are in use when deriving PPPs for the total of GDP.
- GDP level PPPs are commonly used instead which means that the share of health services of GDP is assumed to be the same in nominal and real terms.

# 3. Challenges in the development of health-specific PPPs

Challenges:

- Lack of market prices due to component of nonmarket activities
- Lack of consistency in classifications e.g. DRGs which lead to difficulty in measuring quantities
- Lack of consistency in reporting of cost data e.g. assignment of overheads, boundary between health and social care in long term care
- Measurement of quality changes which should be assigned to volume output not prices

Thus, different kinds of data have to be used in the compilation of PPPs. Where prices or data on costs of service production are unavailable, it is more practical to rely on quantity data and estimate PPPs indirectly.

Prices/costs, quantities and expenditures should be fully consistency to avoid biases.

## *4. The issues to be addressed in the development of health specific PPPs*

What “bundle of activities” should be chosen to focus on for the measurement of quantity, quality and prices?

At what level of detail should the information be gathered: must we privilege the diseases, the providers, the procedures, and a combination of these parameters with also the characteristics of the patients?

It seems also that, due to differences in the availability of data and classifications used in countries, flexible approaches have to be applied to reinforce comparability between countries. This means particularly that if available base data are comparable in a pair or group of countries, maximum use should be made of such information rather than requiring exactly the same data from all countries. Is this flexible approach to comparability acceptable to members?

Pilot data collection for the purpose of health PPPs. A pilot data questionnaire would be necessary not just to assess availability of data but also assess the sources and methods for compiling data. What sort of information should be collected in the pilot questionnaire?

# *Members of the Taskforce*

*Are invited to:*

- **Comment** on the issues to be addressed and make suggestions for further issues in the development that have not been included.
- **Indicate** whether they would be interested in contributing to the methodological development and whether their countries would be interested in principle in participating in the pilot collection of data availability and sources.