Value Based Pricing (VBP) in Swedish Health Care

Ulf Persson

IHE, The Swedish Institute for Health Economics &
Institute of Economic Research, School of Economics and Management, Lund University, Sweden

E-mail: up@ihe.se
The Swedish Health Care System
Pricing and reimbursement of new pharmaceuticals (innovations) for outpatient use (prescriptions)

- National level
  - Free pricing – no reimbursement
  - Reimbursed pharmaceuticals – Value Based Pricing (VBP) system formalized with the LFN establishment in 2002
  - Reimbursement is based on Cost-Effectiveness; but also other factors relevant for value should be taken into account
Key principles of Value Based Pricing (VBP) of pharmaceuticals in Sweden

1. **Societal perspective** in order to consider cost offset in other sectors/budgets than the health care
2. A **threshold value**, based on individuals maximum willingness-to-pay for a QALY gained
3. **Marginal decreasing utility** of treatment, e.g. the benefit varies by indication or by degree of severity
Dental and Pharmaceutical Benefits Agency (TLV) in Sweden

- Decide reimbursement and establish price for drugs
  - within the national benefit scheme for prescription drugs
- Based on application from manufacturer or own initiative
- Decisions based on 3 criteria:
  - Equal value of all human beings
  - Need & solidarity
  - Cost-effectiveness
- Product-oriented
1. Consequences in a social economic perspective

Other pharmaceuticals
Outpatient care
Inpatient care
Social services (home care, rehabilitation)
Value of lost production

Life expectancy
Quality of life

Relationship between costs and Quality Adjusted Life Years gained (QALYs)
2. Equity /“need” adjusted reimbursement decisions compared with a constant cost-effectiveness threshold

Cost/QALY

Degree of severity/“need”

Adjusted threshold

Threshold
3. Diminishing marginal utility of drug treatment

Benefit of health:

Number of treated patients

Indication 1

Indication 2

Indication 3
Value Based Pricing (VBP)

Price, volume and consumer surplus

$A = \text{Consumer surplus, at price } P_2 \text{ and } Q_2$
System has worked reasonably well
Price premium for innovations was awarded

Some examples from diabetes (insulin)

- NPH insulin € 1.50 per day
- Insulin analogs (Lantus, Levemir) € 1.90 per day:
  - Similar HbA1c, but less weight gain and lower risk for hypoglycemia
- GLP-1 analog (Byetta) € 3.20 per day
  - Similar HbA1c, but reduce weight and postpone diabetes progression
System has worked reasonably well
Price premium for innovation was awarded

Some examples from oral diabetes treatments

- Sulfonulurea € 0.15 per day
- DPP-4 inhibitor (Januvia, Galvus, Onglysa) € 1.60 per day:
  - Similar HbA1c, but weight reduction and lower risk for hypoglycemia
Intrinsic problem or contradiction in the Swedish system: National reimbursement decision but regional health care system

- Decisions on use (quantities) are taken at regional level
- Focus on budgets (price times quantities)
- Consequence: Regional variations in the use of new innovations; over or under (most common) the indications for which Value was established

- Tyverb and Avastin: examples of drugs not awarded reimbursement by national bodies but accepted and covered by some regional health care providers
National vs. Regional/Local

- **National**
  - VBP
  - Price & Reimbursement decisions
  - "Arm lengths" approach
  - Broad societal perspective
  - Individuals WTP for QALY gain

- **Regional/Local**
  - Politicians responsible for resource allocations
  - Media influence important
  - Silo perspective
  - Cost containment
  - Budget responsibility
Where is VBP heading in Sweden?

- Expanding the mandate for TLV for hospital drugs (decided)
- Medical devices – TLV request, Cost per QALY-same as for pharmaceuticals
- Procurement and VBP? From VBP to price comparisons, without looking at value?
- New composition of TLV board (more administrators from March 2010). Focus on cost containment and procurement. National drug budget?
A balance between three goals

1. Cost containment
2. Cost-effective implementation
3. A sustainable system require instruments encouraging innovations