

## Cost-effectiveness in the Swedish reimbursement process

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## Nordic NICE?

"The LFN is regarded by the industry as something of a Nordic NICE, as a result of what is perceived as a purist approach to pharmaco-economics. The outcomes of its work are expected to prove influential both regionally and internationally" (*IMS, Pharma Pricing & Reimbursement*)

A very flattering comparison but there are differences ...



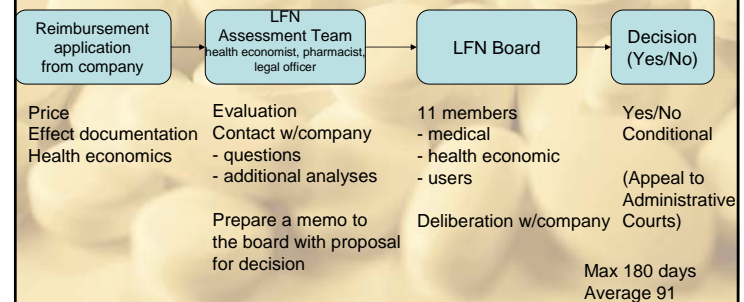
## Background

The Pharmaceutical Benefits Board (LFN): a government agency (instituted in 2002)

- Pricing and reimbursement (ex ante)
- New products
- Reviewing all existing products



## Reimbursement decision process



## Assessments

- Focus on cost-effectiveness from a societal perspective (Cost/QALY)
- Comparison with most relevant comparator (not necessarily a drug)
- The type and scope of the analysis can vary
- General practice

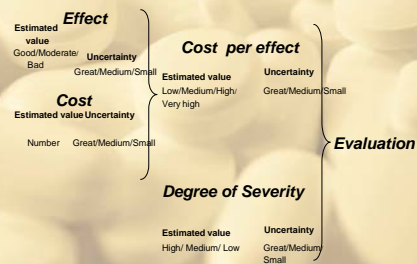


## Prices

- Prices are proposed by the applicant
- The price is an integral part of the cost-effectiveness assessment
- No price negotiations
- No reference pricing
- No jumbo groups



## Evaluation



## Cost-effectiveness

- The effect of the medicine
  - What effect does the medicine have?
  - Which treatment is the most relevant comparator?
  - Is this medicine better than the comparison alternative(s)?
  - How good is the evidence for the medicine's effect? High/Medium/Low?



## Cost-effectiveness

- Costs
  - What are the treatment costs?
  - How large are the costs for this treatment compared to the alternative(s)?
  - How good is the evidence for the cost estimations? High/Medium/Low?
  - How big is the uncertainty surrounding these costs?



## Need – the severity of the disease

- The disease
  - Symptoms
  - Ability to function
  - Quality of life
  - Risk of premature death
  - Risk of permanent disease/injury
  - Risk of worsened quality of life incl. decreased autonomy
- Estimated severity of the disease
  - High/Medium/Low
  - with
  - Great/Medium/Small uncertainty



## Guidelines for Health Economics

- Cost effectiveness analysis is preferred
- Costs must describe the situation in Sweden
- Societal perspective (Costs in added years of life (net consumption))
- QALYs are the preferred measure of effect
- QALY weights based on patient preferences
- Relevant comparator
- Good empirical data important, but modelling is often necessary
- Provide the model - Transparency



## Key challenges

- Correct comparator
- Defining need
- Transparency



## Imperfect information

*"... the danger is that the perfect will be the enemy of the merely good. Therefore it is important to recognize that ... reimbursement decisions are made at a time when only imperfect information is available. ... whether they lead to a better decision than would have been made in their absence."*

*Drummond, Sculpher (2005)*



## Decision-making criteria

- **Human value**
  - respect for equality
- **Need and solidarity**
  - those in greatest need take precedence
- **Cost-effectiveness**
  - from a societal perspective



## Decisions

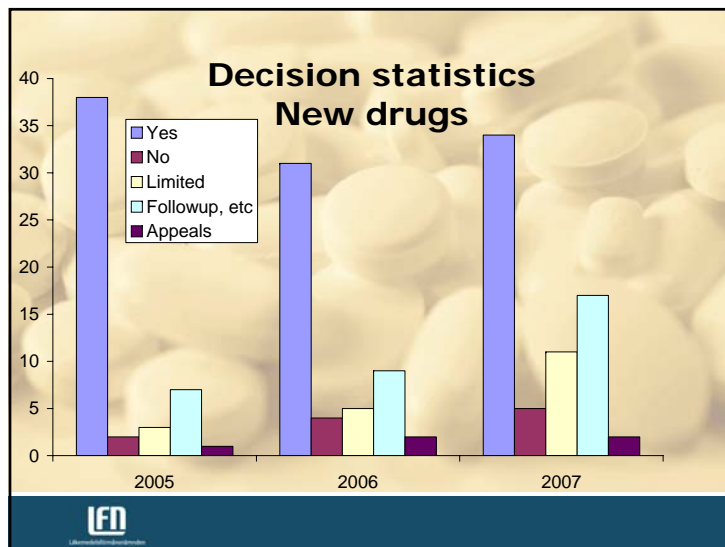
- Full reimbursement or none.
- Restricted/limited reimbursement
  - Specific patient group
  - Time limited
  - Marketing requirements
- Request for follow-up data



## Cost-effectiveness in the decision making process

- In Sweden the law on pharmaceutical reimbursement states that cost-effectiveness shall be balanced against the principle of need and solidarity.
- Similar aspects of need, disease severity etc are present in many other European countries either explicitly in law or implicitly in the way decisions are made.





## Why balance against other factors?

- In theory C-E should lead to the maximum amount of health if applied to all interventions

However most societies seem to have a preference for the distribution of health across individuals.

As societies we want to help the more severely ill first.

Fairness matters!



## Solutions?

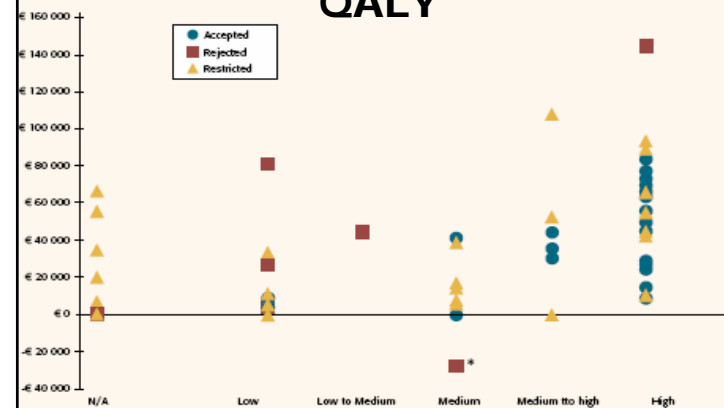
Differentiated willingness to pay for a QALY

The preference for fairness could be expressed by society being willing to pay more for a QALY gain if it benefits a patient with a higher need.

This is the approach used by the LFN. There is however no explicitly stated threshold value for a QALY in Sweden.



## Willingness to pay for a QALY



## Evaluation cont.

- Is a restriction needed?
  - Would it contribute to a more cost-effective use of the medicine?
  - Disease dependent
- Would it work in everyday clinical practice?
  - Is it possible to clearly define a patient group?
  - Will the restriction be understood/accepted?
- Are conditions needed?
  - Would it contribute to a more cost-effective use of the medicine?
  - Improved information within a reasonable amount of time?



Thank you for your attention!



## Backup slides



## Yes

### Prezista (darunavir) for HIV

- A new protease inhibitor (PI) for use in patients who have failed on at least one PI-regimen
- More expensive than other PIs
- The health economic analysis showed that the cost per QALY was fairly low (~ €11 000) compared to relevant comparators
- High severity of disease with a need for more treatment options

Approved for reimbursement for the given indication. If a new indication is approved the company must apply again.



## No

### Procoralan (ivabradin) for angina

- Indicated for use when beta-blockers not appropriate.
- But calcium channel blockers are cheaper
- Health Economic comparison as last line vs. Surgery
- Procoralan was cheaper than surgery but also less effective

The cost savings per QALY lost were not considered large enough.



## Restricted

### Champix (vareniclin) for smoking cessation

- Health economic model shows cost-effectiveness compared to bupropion

Reimbursed if given in combination with motivational support and as a second line treatment

The company shall provide information showing this by 2010

Inform of the restrictions in their marketing



## The reimbursement review

Sales value in 2003 determines the order

- 49 therapeutic groups
- 1. *Migraine*
- 2. *Diseases caused by stomach acid*
- 3. *Hypertension*
- 4. *Asthma, COPD and coughs*
- 5. Depression
- 6. High cholesterol
- 7. Pain and inflammation
- 8. Diabetes
- 9. Incontinence and prostate
- 10. Rheumatism
- 11. Osteoporosis

