



How to apply no policy change approach

- **Demand driven programs where entitlements are legislated**
 - Project demand on the basis of volumes and prices
- **Programs with a fixed budget allocation**
 - Project on the basis of same real level of expenditure
- **More challenging areas are those that fall somewhere in between the above cases**
 - Programs where the the no policy change approach involves a volume adjustment
 - For example, the no policy change approach would require the same level of services per person for the in recipient population

Approaches to forward estimates for health care in Slovak Republic



- **A. Prepare forward estimates for government's contribution**
 - Covers net cost to the budget
 - Does not cover full impact on the general government sector
 - No policy change approach
 - Current level of government contribution, less any one-off factors?

Approaches to forward estimates for health in Slovak Republic (cont)



- **B. Prepare forward estimates for total spending and revenue on health care**
 - Broader coverage of general government sectors
 - Allows comparison on spending and contributions to determine projection of government contribution

Calculating forward estimates for health care



- **Approach A only requires the projection of the government subsidy**
 - This could be based on the current contribution projected by wages growth and the growth in the economically inactive population

Calculating forward estimates for health care



- **Approach B requires each forward estimates for each major area of health care**
 - Ideally each area projected on the basis of growth in volumes and prices
 - Methodology may depend on the availability of data eg. separate price and volume data
 - Alternative is to use expenditure data but this basis makes it more difficult to link to macroeconomic price parameters



- **Pharmaceuticals**

- Demand driven volumes
- Prices affected by policy changes: reference pricing and use of generics

- **General practitioners**

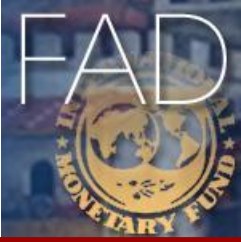
- Capitation fees means that price growth is the key component
- Prices set in contracts between HICs and providers



Health care cost drivers

- **Outpatient specialists**

- Volumes determined by health insurance companies
 - eg monthly budget caps for specialists
- Prices also set in contracts between HICs and providers



Health care cost drivers

- **Hospitals**

- Volumes of completed hospitalizations, and same day and short stay services
- Average prices a function of price growth agreed in contracts and changes in composition

No policy change modelling by Ministry of Finance



- **Econometric model of determinants of expenditure**
 - Seven major categories of health care expenditure
 - Historical data from 2005 to 2016
 - Use forecasts of explanatory variables to project expenditure

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- **Regression results**
 - Demographic variable
 - Persons aged over 55 (or 65)
 - Economic variables
 - Wages
 - GDP

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- **Advantages**

- Provides trend forecast
 - Can reflect no policy change approach if policy environment has been stable
- Availability of data
- Can be updated for economic forecasts

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- **Disadvantages**

- If policy has been changing, it forecasts policy outcome, rather than no policy change baseline
- Economic variables indirectly capture both price and volume effects
- Causality issues
 - Since the income of HICs is a function of wages, this variable may simply reflect the income constraint

No policy change modelling by Ministry of Finance



- **Disadvantages**

- Difficult to link to costing of policy measures
 - Need to assess policy impact on price and volume drivers
 - Ideally this should be based on the same methodology as the baseline



Baseline methodology

- **Depends on the availability of data**
- **Challenges with use time series when policies have been changing**
 - Need to estimate cost of current policy
 - Estimation based on long term history builds in growth due to policy changes
 - Better approach is to use recent growth rates that are more representative of current policy
- **Balance between complexity, usability and accuracy**

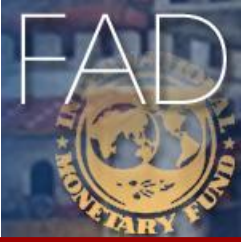
Calculating baseline for areas of health care



- **Outpatient specialists**

- Health insurance companies determine the quantity of specialized health services
 - eg monthly budget caps for specialists
- Possible NPC approach is to use current level of services
- If demand is broadly stable, this implies largely unchanged waiting times

Calculating baseline for areas of health care



- **Pharmaceuticals**
 - Demand driven – estimate volume growth and weighted average price change
- **General practitioners**
 - Capitation fee
 - Volume growth is growth in eligible population
 - Fee for service arrangements
 - Separately project volumes
 - Project price growth

Calculating baseline for areas of health care



- **Hospitals**

- Project volumes for completed hospitalizations
- Project on the basis of services for same day and short-stay surgeries
- Project price growth for each category