

# Regional Modelling Advantages and Limitations

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# Overview

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## Advantages

- » coordinated presentation of the regional situation in health care
- » optimization and clean-up function
- » consideration of region-specific peculiarities
- » potential for improving the data situation and developing methods
- » better evaluation of measures, qualified decisions
- » potential for improvements in policy communication, trust and justification

## Limitations

- » “NEED” – as THE important input for regional modelling – is not objectively measurable.
- » "Regional Modelling" is based on quantified baseline figures and influencing factors ONLY
- » BUT: the regional system-realities are differentiated and complex
- » knowledge about significant QUALITATIVE influencing factors is usually insufficient and difficult to map in quantitative models.
- » what is the appropriate level of TRANSPERENCY?

# ADVANTAGES

## Advantages: Supply Dimension

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- » The **coordinated presentation of the regional situation in health care** across the sectors is a value in itself.
- » **Effects of implementing national targets in health care** become visible at regional level  
→ *target coherence and conflicting goals become transparent*
- » **Optimization and clean-up function:** Ideally, overuse, underuse and misuse become visible (analysis) and corrected (plan).
- » **Better evaluation of measures:** simulation techniques make measures and their effects more visible and assessable (scenario techniques – qualified decisions)
- » **Consideration of region-specific peculiarities** becomes possible to a certain extent  
→ *each region has its own “health care reality”*

## Advantages: Data and Methodological Dimension

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- » **Quantification of regional peculiarities**  
(depending on the data situation)  
→ *improvement of the regional level of knowledge*
- » **Data deficiencies in quantity and quality become visible**  
(mandate to act to improve analysis and planning as a basis for qualified decisions)  
→ *improvement and further development of the data world*
- » **Increasing acceptance of the documenters**  
(they see that "their" data work has real effects)  
→ *improvement of data quality*
- » **Method development promoted**  
→ *more knowledge, data and application experience leads to method diversity, scientific exchange and innovation*

## Advantages: Political Dimension

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- » **Communication function:** The system partners are invited to exchange their intentions and data – this promotes system coordination.
- » **Trust function:** The system partners can adjust to developments in the medium to long term on the basis of the "plans".
- » **Justifying function:** The development of an analysis and plan documents the will to act and technical competence; the existing plan makes responsibility visible.

# LIMITATIONS

## Limitations: „*need is not objectively measurable*”

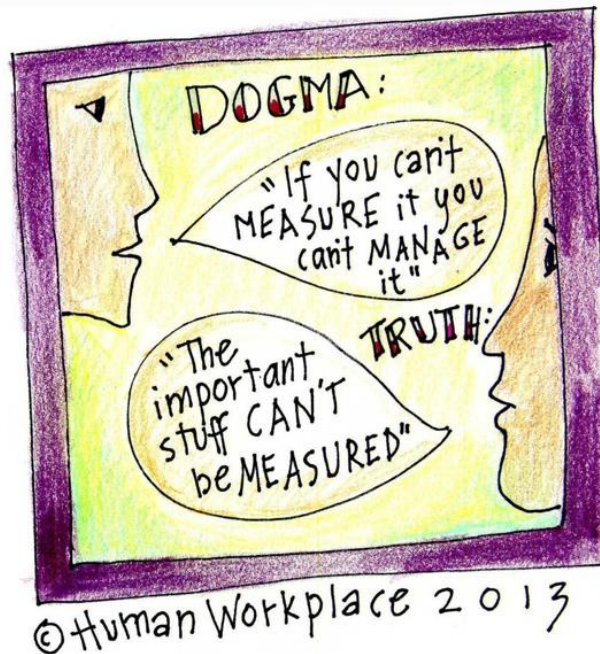
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- » Health care services should be designed **to meet the needs of the community** (usually based on the community's morbidity).
- » **Need** can be seen in different ways and **is not objectively measurable.**  
→ *but it's the input for regional modelling*
- » In general **three different aspects** should be distinguished:
  - » **Desire** → personal judgement → surveys give an impression
  - » **Utilization / Demand** → routine health care data
    - » Unmet needs (underestimation of need)
    - » Supply induced demand (overestimation of need)
  - » **Need** → somewhere in between
- » The definition, when a desire becomes a need will differ within countries **and regions** depending on different aspects
- » This discussion can be very controversial and in the end **a political decision is needed.**



# Dogma *versus* Truth

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Source: <https://www.forbes.com/sites/lizryan/2014/02/10/if-you-cant-measure-it-you-cant-manage-it-is-bs/#28bb95ea7b8b>

What we measure is only a partial representation of the reality of a situation of any (regional) complexity at all.

# Only what is measurable is measured

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## Measurement Focuses Attention on Some Things, Not Others



- Source: [larrycuban.wordpress.com](http://larrycuban.wordpress.com)

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## Limitations: „*you manage only what you can measure*“

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- » „*You can't manage what you don't measure*“ (Peter Drucker) **versus** „*You have to manage what you can't measure*“ (unknown)
- » The **realities in regional health care** are differentiated and complex  
→ *geographically, socio-culturally, topographically, small regionally often determined by key persons*)
- » **Limited knowledge** of (especially regional) relevant influencing factors / special features  
→ *survey often time-consuming and expensive and can generate regional expectations (e.g. regional conferences)*
- » **Limitation of the quantifiability** of the relevant influencing factors
  - » qualitative influences (*"soft facts" such as waiting times*)
  - » data deficiencies in availability and quality
- » **Cross-sectoral perspective**  
→ *need for meaningful cross-sectoral metrics (different systems and logics)*

## Limitations: „*what is the right dose of transparency*”

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- » **Analysis and planning results only for elitist group**  
→ *Numerous potential advantages are not effective, e.g.*
  - » Acceptance of the documenters **remains unchanged**  
→ *they know nothing about the use and real meaning of "their" data*
  - » Data deficiencies in quantity and quality are **not generally visible**  
→ *no transparency, no problem awareness, no improvements*
  - » Development of methods is **insufficiently promoted**  
→ *No transparency, no scientific exchange, no innovations*
  - » Communication, trust and justification functions cannot or only **weakly develop**
- » To what extent does **transparency** lead to **more knowledge** and where does the **confusion** begin?

# Conclusio

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- » what is the appropriate level of transparency?



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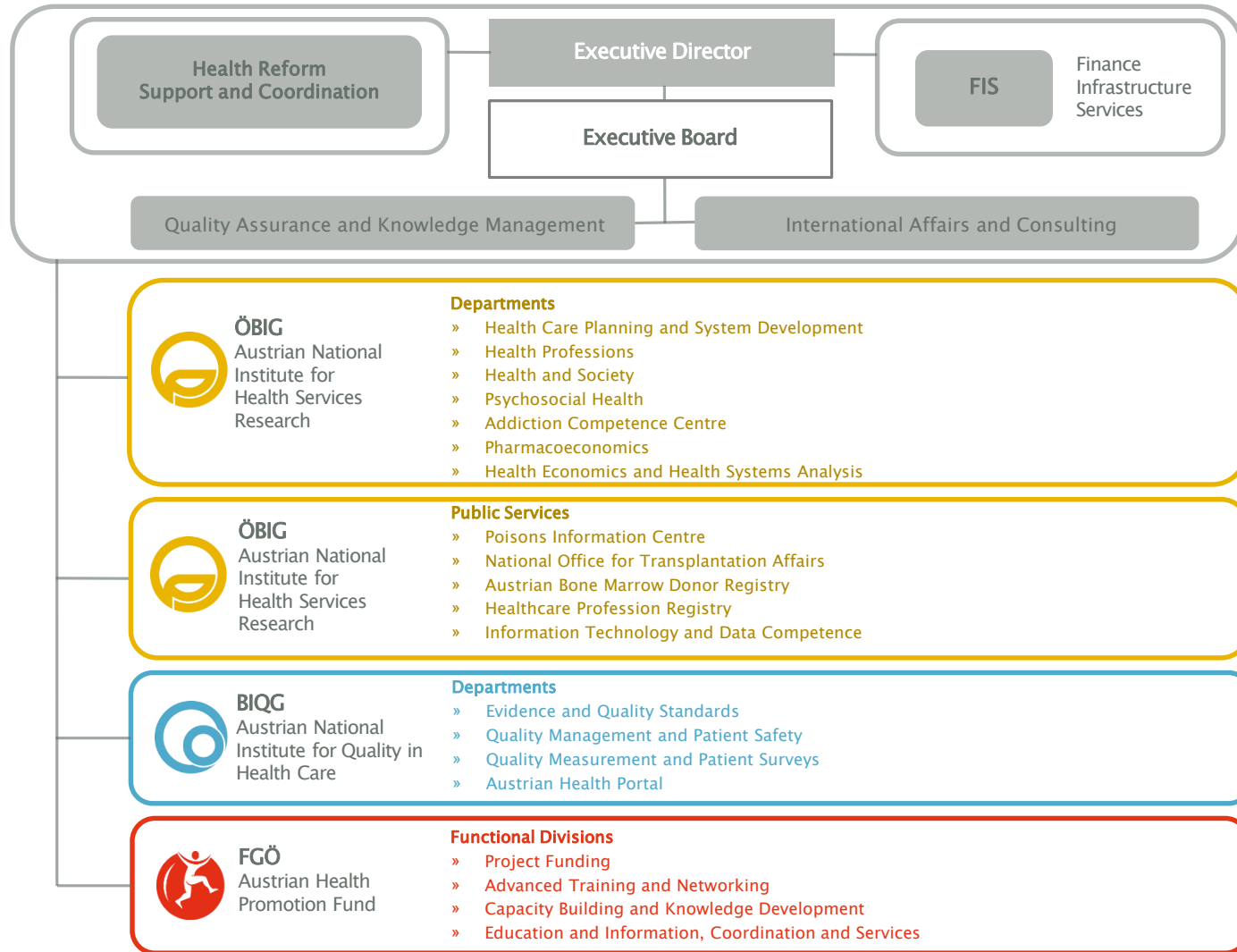
**BIQG**  
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#### Subsidiaries

Gesundheit Österreich Forschungs- und Planungs GmbH (non profit)  
Gesundheit Österreich Beratungs GmbH (for profit)

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