Regional Modelling
Advantages and Limitations

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Overview

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: Supply Dimension

» 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

» 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

» **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”

» 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

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

Source: [https://www.forbes.com/sites/lizryan/2014/02/10/if-you-cant-measure-it-you-cant-manage-it-is-bs/#28bb95ea7b8b](https://www.forbes.com/sites/lizryan/2014/02/10/if-you-cant-measure-it-you-cant-manage-it-is-bs/#28bb95ea7b8b)
Only what is measurable is measured

Measurement Focuses Attention on Some Things, Not Others

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Source: larrycuban.wordpress.com
Limitations: “you manage only what you can measure”

» „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“

» 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?
Conclusions

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ÖBIG
Austrian National Institute for Health Services Research

BIQG
Austrian National Institute for Quality in Health Care

FGÖ
Austrian Health Promotion Fund

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