

Economic Evaluation of Structural Measures in Acute Hospitals

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GÖG–Model: Objective and Implementation

Objective

Model for

- » „ex ante“-estimation
- » of the economic effects
- » of planned structural measures
- » in acute hospitals

Implementation

The calculation model evaluates

- » the effects of changes in nursing days (and beds)
- » depending on the respective organizational form (department, daily clinic, weekly clinic)
- » on running costs
- » in the acute inpatient care sector
- » taking into account the temporal timeliness of the occurrence of the cost effects

GÖG-Model: Central Logic – Structural Level Concept

Structural Levels

part of a ward

1 to 14 beds

entire ward

15 to 29 beds

entire department

30 beds or more

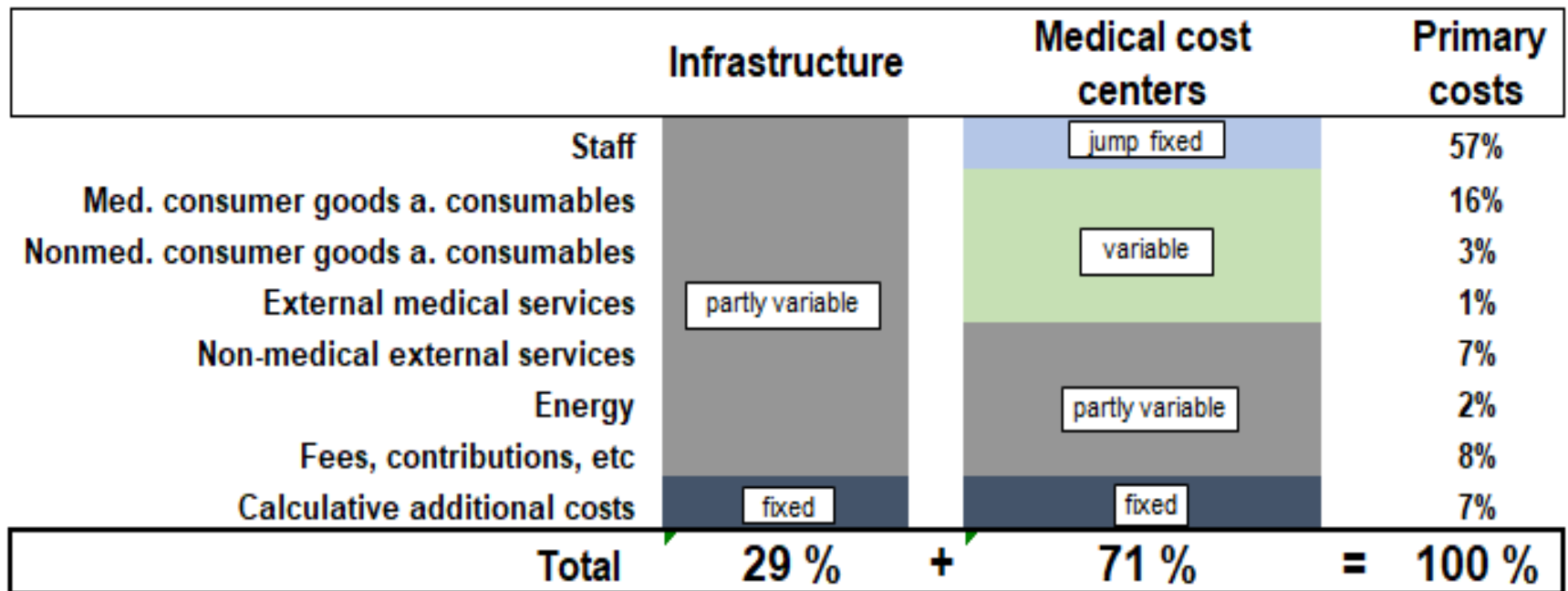
entire hospital

► **Structural characteristics** for occurrence and extent of

- » **fixed,**
- » **jump fixed** and
- » **variable costs**
- » per bed or (converted using the standard bed utilization) **per nursing day**

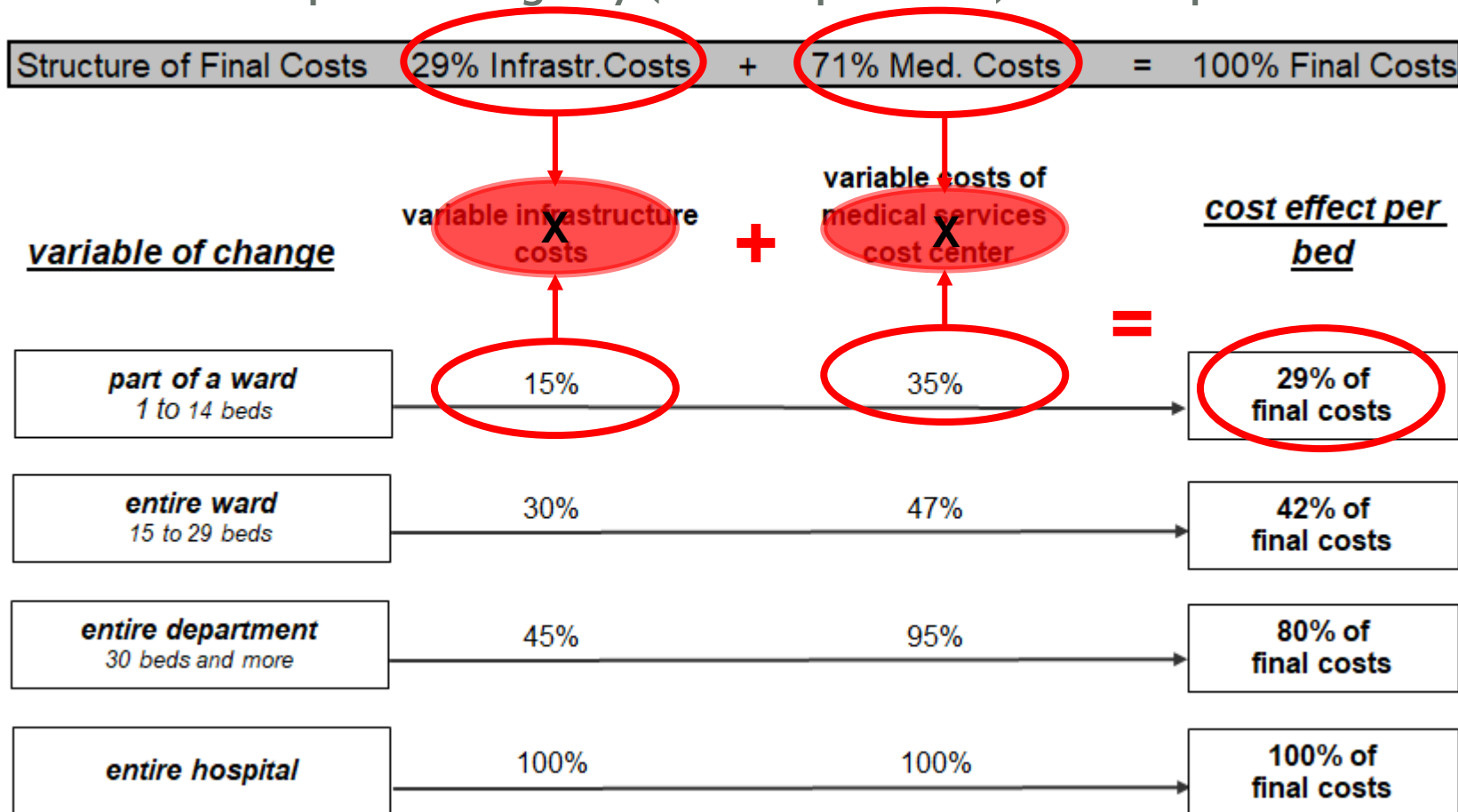
GÖG-Model: Cost Structures

Fixed, jump fixed and variable costs by cost types and cost centers
 → *exemplary representation*



GÖG-Model: Cost Effects

Cost effects per nursing day (or occupied bed) and hospital



Work step: Calculation of the cost effects per nursing day or (occupied bed) for each medical specialty in each individual fund hospital!

Application Example

Orthopaedic Hospital

(scenario: closed)

All Cost Centers	beds 2016	beds scenario	care days scenario	care days change	variable costs change	total costs change	costs per care day
Orthopaedics	166	0	0	-53.484	-€ 8.575.733	-€ 33.998.402	€ 636
Remobilisation	11	0	0	-7.154	-€ 336.872	-€ 1.335.525	€ 187
Intensiv Care	4	0	0	-130	-€ 314.304	-€ 1.246.055	€ 9.622
Main Costs Centers	181	0	0	-60.768	-€ 9.226.909	-€ 36.579.982	
Ancillary Costs Centers ¹⁾						-€ 3.782.931	
Total						-€ 40.362.913	

¹⁾ health care and nursing school , staff housing, pensions, etc.

Regional Main Hospital

(scenario: 72 % of care days of the OR-hospital are shifted to the regional main hospital)

Relevant Cost Centers	beds 2016	beds scenario	care days scenario	care days change	variable costs change	total costs change	costs per care day
Orthopaedics	0	119	38.663	38.663	€ 9.124.091	€ 26.068.430	€ 674
Remobilisation	0	8	5.165	5.165	€ 475.475	€ 1.358.478	€ 263
Intensiv Care	14	17	1.829	94	€ 150.205	€ 150.205	€ 4.660
Main Costs Centers	14	144	45.657	43.922	€ 9.749.771	€ 27.577.113	

GÖG-Model: Limitations

- » Valuation basis are the **actual costs**
 - *extrapolation of the degree of utilization of business efficiency potentials*
- » No explicit reference to the **service spectrum**
 - *this essentially includes extrapolation of the current service mix (with the exception of differentiating between single-day and multi-day cases)*
 - *measures e.g. to concentrate particularly cost-intensive services at one location require an accompanying assessment of the service component outside the model.*
- » No exact **individual business valuation** of a measure
 - *individual business measure(s) (such as investments) are not taken into account.*
 - *no detailed efficiency analyses of the service delivery process*
- » The instrument is suitable for an **overview-like economic evaluation of regional structural plans** but not for detailed economic analyses of individual measures



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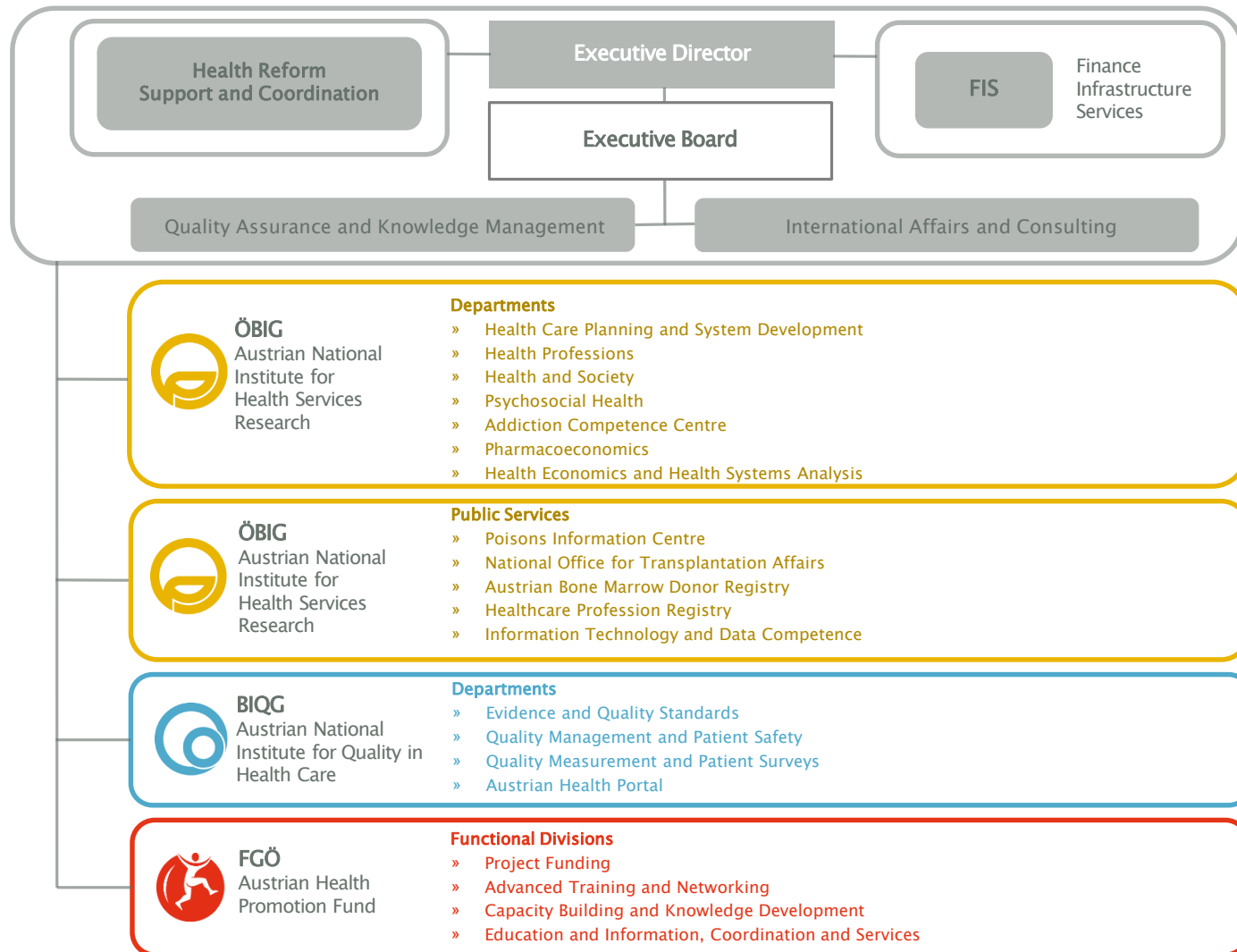
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for Quality
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