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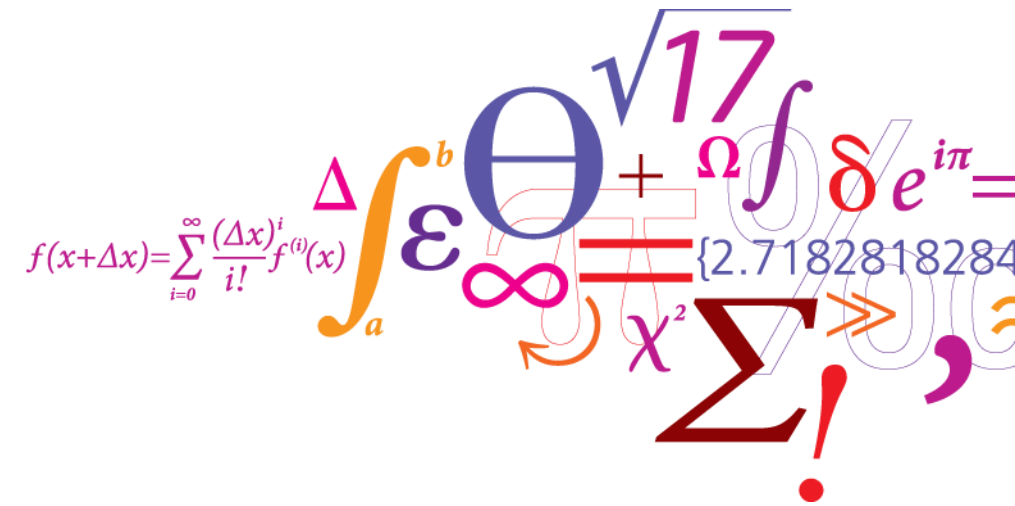
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From activity-based costing to Value-based Care in Danish Health Care

By Henrik Bøgedal Breddam¹, Kasper Edwards¹, Charlotte Vilhelmsen¹
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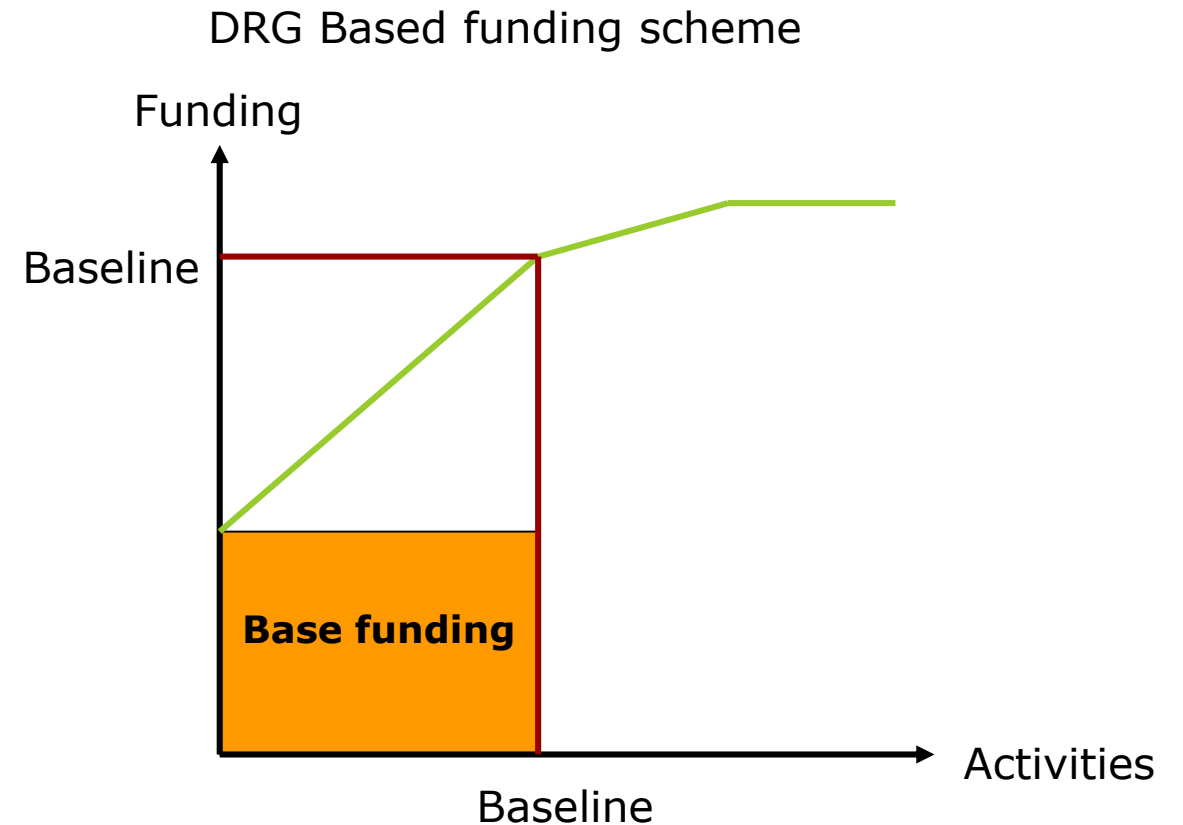
Why Do We Need Value Based Health Care?

"You get what you measure!"



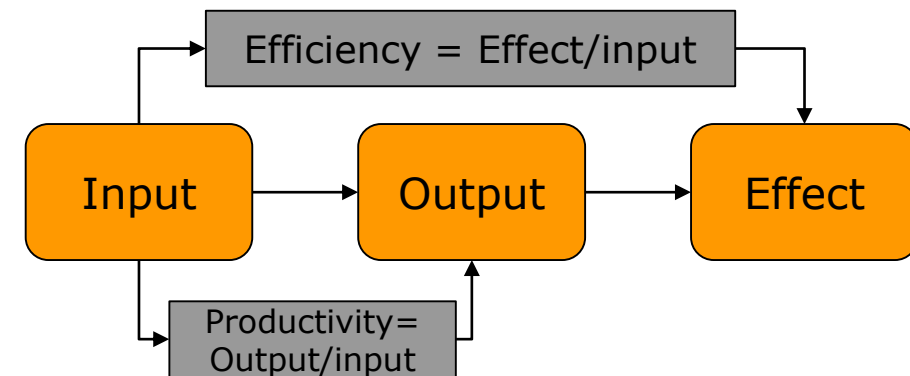
Up to speed on the Danish Health Care System

- Managed by 5 regions
- Funded by:
 - ~82% State
 - ~18% Municipality
- Based on Diagnosis Related Grouping
- 2% annual growth in baseline level



The Danish Discussion

- The system have become very productive
- But what about the effect?
- Choice of less invasive treatment:
 - Often preferred by patients
 - Shorter recovery time
 - Cheaper
- Moving care to lowest effective cost level
- Consolidation of treatment



What is Value?

- Michael Porter provides a good definition:

$$\text{Value} = \frac{\text{Outcome}}{\text{Cost}}$$

Multi dimensional

- Survival
- Health status
- Time of recovery
- Patient experience
- Etc.

Measured over the full care cycle

- Porters grand vision: Design a system that competes on value and the free market will in it self maximize it!

Value Based Health Care in a Danish Context

- Earlier trials:
 - Medical staff choose clinical KPIs
 - Bornholm Hospital in its entirety with 8 initiatives to improve value
 - Incentive linked to value statements
 - Flexible ambulatory care

- I have analysed 7 cases from Capitol Region:
 - 4 projects that are focused on deferring unnecessary activities
 - 3 projects that work with Value as a management tool

Finding the Implications of Value Based Health Care

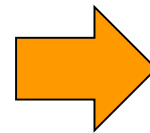
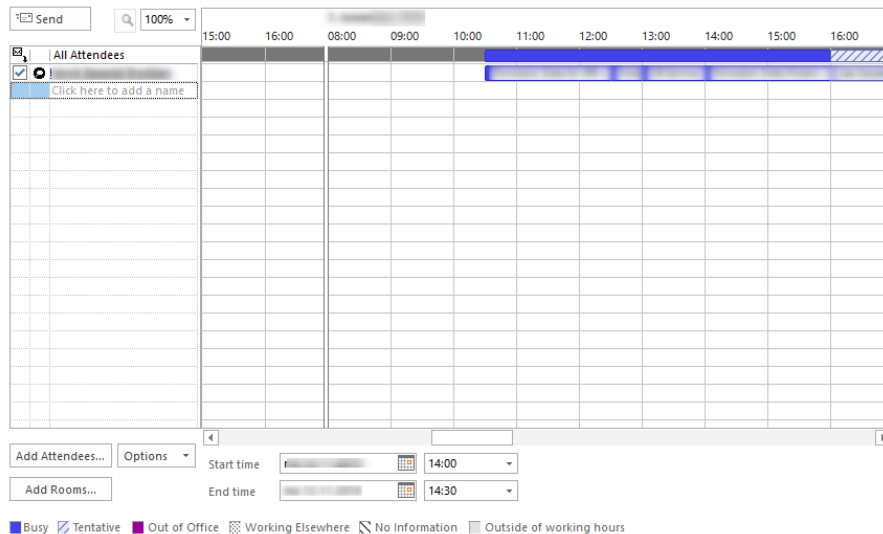


- Task 1: Identify the operational changes going from activity based to value based
- Assumption: Some operational tools needs to change such as:
 - Planning and scheduling models and algorithms
 - Decision support tools
- Task 2: Create Value Based models for health care planning using Operations Research
- Task 3: Implement these tools in a department

Example: Planning Needs Based Ambulatory Care

- Moving from periodic check-ups to needs based ambulatory care means:
 - More time critical and include several functions
 - Change in patient mix
 - More focus on how to live with the medical condition

1 doctor 6 month ahead



6 hospital 1 week ahead

