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

Breddam, Henrik Bøgedal; Edwards, Kasper; Vilhelmsen, Charlotte

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

By Henrik Bøgedal Breddam¹, Kasper Edwards¹, Charlotte Vilhelmsen¹
¹DTU Management Engineering
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

\[
\text{Efficiency} = \frac{\text{Effect}}{\text{Input}}
\]

\[
\text{Productivity} = \frac{\text{Output}}{\text{Input}}
\]
What is Value?

- Michael Porter provides a good definition:

\[
\text{Value} = \frac{\text{Outcome}}{\text{Cost}}
\]

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

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

Measured over the full care cycle
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