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

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Publication date:
2018

Document Version
Peer reviewed version

Link back to DTU Orbit

Citation (APA):
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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 prefered 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:

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

• 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