

HIGH CASE VOLUME SAVES LIVES AND MONEY BUT MAKES PATIENTS UNHAPPY!

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RESEARCH OBJECTIVES

Four correlations were systematically analysed in a literature review

1. Relationship between increased hospital/physician volume and patient outcome
2. Relationship between case volume and economical efficiency
3. Effect of pooling of case volume into larger health care facilities on patients and physicians satisfaction
4. Identification of value drivers on pooling case volume from perspectives of patients, doctors as well as hospital executives

RESEARCH METHOD

Medical literature review

- 340 titles on hospital/physician volume and patient outcome
- 90 titles on case volume and economical efficiency
- 130 titles on case volume and patient satisfaction

Health care business literature review

- 96 titles about value drivers on pooling case volume from hospital stakeholder perspectives

Critical data analyses

- Majority of papers were rejected because few actually attempted to measure any of the aspects of interest to this review
- 26 titles about case volume and medical outcome
- 8 titles about economical efficiency
- 14 titles about patient satisfaction
- 59 titles about value drivers

RESEARCH RESULTS

Medical results

There are lower mortality rates in high-volume hospitals for:

- Oesophagectomy
- Pancreatectomy
- Coronary artery bypass
- Carotid endarterectomy
- Radical prostatectomy
- Pneumonia therapy
- Hip replacement and knee replacement surgery
- Neurosurgery for brain tumour excision

Economic efficiency

Economic efficiency correlates with the findings about medical outcome.

Patient satisfaction

Patient satisfaction is generally negatively associated with high-volume procedures and the travelling time to the hospital especially for aged patients except for patients with complex diseases.

Value drivers

- Value drivers on pooling case volume are:
- Establishment of minimum case volume requirements per complex medical condition
 - High reputation of the hospital surgeons
 - Recommendations of primary care providers regarding a specific surgeon
 - Relationships between hospital surgeons and referrers
 - Quick access to high-end technologies and linked disciplines
 - Specialisation on service lines with regard to complex medical conditions

▶ HOW CAN POOLING OF CASE VOLUME GUARANTEE BETTER QUALITY?

THE IDEA

Medical outcome, economic efficiency and patient satisfaction will be enhanced significantly through the development of value-based focal hospitals for complex medical conditions inside a hospital network organisation.

THE ARGUMENTS

Only for complex medical conditions there is evidence regarding the relationship between case volume and medical outcome quality.

The relationship between pooling of case volume and economic efficiency correlates with the relationship between pooling of case volume and medical outcome.

High-volume hospitals are only attractive for severely ill patients with complex medical conditions.

THE NEW APPROACH

Implementing minimum case volume standards per hospital and per complex medical condition.

Developing hospital specialisation and implementing specific service lines including specialised treatment teams, high-end technology and intensive care units with regard to particular complex medical conditions.

Building relationships and reputation between medical service teams, including highly specialised surgeons, and referring doctors.