

Intervention Selection Toolbox to improve patient-relevant outcomes: an implementation and qualitative evaluation study in colorectal cancer surgery

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Introduction

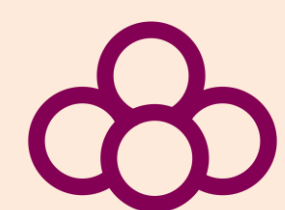


Value-based healthcare (VBHC) aims to improve patient-relevant outcomes relative to the costs

No systematic approach in VBHC to bridge the gap between insights in outcomes and actual improvements in healthcare

The Intervention Selection Toolbox identifies and selects improvement interventions based on insights in outcomes and care delivery processes and may bring VBHC in practice

No implementation of the Intervention Selection Toolbox in daily practice after initial development



We aimed to evaluate the implementation of the Intervention Selection Toolbox in the daily practice of a hospital setting

Results



80 initial quality improvements

Two high potential improvements selected

Step 4 and 5 were not systematically implemented



Ten interviews

Medial specialists, nurses and paramedical staff
Age: 18-61 years
Experience: 6-38 years

All participants considered the Intervention Selection Toolbox as added value

Clear communication, repetition of the benchmarking and standard monitoring were considered key items to assure success

Organizational structure and time management are mentioned as barriers in implementation

THE INTERVENTION SELECTION TOOLBOX

A. IDENTIFICATION

BENCHMARKING PHASE

- Measure outcomes
- Analyse differences
- Determine future trends
- Report outcomes in multidisciplinary team
- Identify possible reasons for differences in outcomes (benchmark)

1

DATA EXPLORATION

- In-depth analysis to find evidence for differences (hypothesis testing)
- Identify risk profile of patients
- Identify possible points for improvement
- Literature analysis

2

CARE DELIVERY PROCESS ANALYSIS

- Bottom-up approach
- Describe the care process over the full cycle of care
- Identify improvement interventions through value-chain analysis
- Rank processes based on impact on outcomes

3

STANDARD MONITORING (OPTIONAL)

- Implement a monitoring system for standard processes/improvements from other sources

4

B. SELECTION

5

CAUSAL CHAINS AND INTERMEDIATE OUTCOMES (OPTIONAL)

- Identify causal chains including process measures and intermediate outcomes

6

CONSENSUS DECISION

- Select intervention based on adjusted Delphi method for consensus
1. Pre-rank intervention
 2. Come to consensus with expert group

Methods

Mixed-methods case study design



Implementation in a multidisciplinary quality improvement team for colorectal cancer



A large teaching hospital setting, which is part of the Santeon consortium, including the improvement cycle

Quantitative overview of amount of quality improvements



In-depth semi-structured interviews on the key elements of process evaluation

Conclusion

The Intervention Selection Toolbox is useful to systematically identify improvement initiatives



Before implementation organizational structure should be optimized to maximize success and efficiency

For future research it would be interesting to assess what organizational structure allows best efficiency and time management, both for improvement cycle and use of the Intervention Selection Toolbox

