

Benchmarking hospital units based on a focused factory concept

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Objective:

Benchmarking hospital units using a framework based on the focused factory concept.

Methods:

Based on a literature study on focused factories we have developed a framework that enables diagnosing and benchmarking hospital units using the focused factory concept. The framework is based on the definition of a focused factory in hospital care as: "An autonomous (part of an) organization characterized by a focus upon a limited range of activities and/or a focus on a well-defined, limited group of patients and alignment of the service delivery system to these focus areas. This alignment implicates that continuous improvements are an objective of the organization."

First a checklist measuring the degree of focus has been developed, based on the definition and adapted for use in the hospital environment. This checklist consists of two dimensions:

- Focus on patient group. This considers the degree to which a hospital(unit) serves a limited, selected, well-defined and comparable group of patients, whose diagnoses share similar characteristics.
- Focus on offered services. This considers the degree to which a hospital(unit) performs a limited range of tasks. This dimension uses the perspective of staff members delivering the service.

The checklist contains 11 multiple-choice questions, wherever possible it uses quantitative indicators. The alignment was analysed using the EFQM model; this also would guarantee a feasible advice for the involved organizations.

From August till October the benchmark format was piloted at three ambulatory treatment centers (ATC) for chemotherapy in Comprehensive Cancer Centers of different sizes in Belgium, The Netherlands and the USA. Interviews, document analysis and patient registration have been used to gather the information needed for the format.

During on-site visits, the alignment of the service delivery system was examined. Special attention was paid to efficiency and patient-orientation. Because neither norm is available for efficiently organized ATC's nor for the degree of focus, and as piloting the benchmark format was the objective, the results have been ranked against each other.

Results:

All studied ATC's were characterized by a high, comparable degree of focus. Although focused factory literature suggests that a higher degree of focus leads to better results (performance results, patient satisfaction, staff satisfaction) we have nevertheless found remarkable differences in efficiency and efforts made concerning patient-orientation. For example, we have found 40% differences in the number of patient visits per staff member in FTE and the average number of patients treated per bed. The analysis also revealed differences concerning priority given to efficiency, patient safety and patient satisfaction possibly explaining the previously mentioned differences.

Conclusions:

This study provides evidence that the developed framework and the related checklist can be used to benchmark hospital units based on the focused factory concept. It proved feasible to use the EFQM model to assess the alignment of the processes to the organizations characteristics; this also guaranteed phrasing of the results in a comprehensible format.

Although the degree of focus in the organizations was similar, differences in efficiency and orientation of the process around the patient needs existed. These differences are likely to be caused by differences in the service delivery system. Therefore we conclude that a comparable high degree of focus does not guarantee an equal degree of efficiency.

The results of the benchmark exercise provided ample suggestions for improvement for each ATC; for instance the Dutch ATC could improve the efficiency. Further analysis (based on a 2-day simulation of bed planning) revealed a 30% increase in use of bed capacity seemed to be possible in the Dutch ATC.