Reduction of variance and non-compliance for sustainable health care: The use of financial data.

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Introduction
The healthcare environment in the Netherlands is changing and this enables hospitals to focus more on efficiency and quality of care. In the Netherlands healthcare providers register a lot of data for financial purposes. DBC's, coupled with a diagnosis and associated activities, are the basis for these financial claims. This extensive registration is needed to declare DBC's to the healthcare insurers and to patients.

Hospitals and other healthcare providers use this data also for, for example, production forecasts and monitoring of correct claim registration. But besides the financial use, we can now turn this data into valuable process information. By analyzing the data in a different way, by using the diagnosis and activities from a healthcare perspective, we can give insight in potential for quality improvement, efficiency improvement, greater patient satisfaction and cost reduction.

Methods
Variation and non-compliance are main causes for instable and unpredictable healthcare processes. We believe that this directly influences efficiency, quality of care and patient satisfaction.

A new method for analysis of the financial data gives us insight into averages and variance for key process indicators. By giving insight in the process variation and non-compliance, potential for improvement becomes clear.

We determined averages and variance per patient group for several key process indicators in hospitals. Some of these indicators are length of stay, extent of diagnostic research, and number of consults. Variance or deviant averages for these indicators, compared to the norm or agreements in clinical care pathways, can then be further analyzed. These results can also be compared to a benchmark. Causes for variance and derogations, like day of hospitalization, are the basis to enhance quality and efficiency.

Results
Results and conclusions
Financial registration in hospitals is extensive. Using this data, and thus without increasing registration burden, can give process information. This information is the starting point for efficiency and quality improvement. Hospitals are able to monitor their compliance and the variance for specific key process indicators. Insight in causes for these results lead to insight in the changes needed for improvement in the care process. These changes can subsequently reduce variation and non-compliance and therefore improve efficiency, quality of care and patient satisfaction. Using this method, data that has been recorded for financial purposes, contributes to sustainable healthcare.

Conclusions
See results.

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