

## Hospital Management System – Our approach to gain comprehensive control



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### **Reason for Comprehensive Management**

There are many developments in the health care sector that complicate the realization and management of the strategic goals of a health care institution. Continuous changes of the finance model, increasing competition; managers can no longer focus on costs alone, but have to take their performance into account as well. Improvement of performances regarding quality, safety, finances and services, has a positive effect on your client satisfaction level and your market position accordingly.

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### **Hospital Management System; approach to gain comprehensive control**

The comprehensive approach allows the management to manage the business better, and to improve the performance of the entire business through insight and control. The approach is based on the Value Chain approach of Porter and combines this with sub-approaches like the balanced scorecard and IDEF-process mapping.

## Value Chain Management

The method of VisionWaves – the Value Chain Management – visualizes the coherence between the different parts of an organization and their contribution to the realization of the business goals. The Value Chain offers a clear overview of what happens within an organization on all levels and how that contributes to the company's goals.

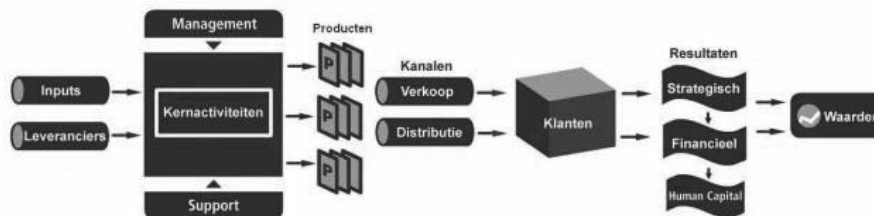


Figure 1: VisionWaves' Value Chain

With a unique and licensed approach, the business is mapped out. From strategic goals and expectations of stakeholders, to descriptions of core processes, support processes, products, channels and client definitions. For each of these aspects, it is specified when and at what level the organization can be said to perform well. Accordingly, performance criteria are assigned. The organization itself chooses the norm. Subsequently, it is established what the current performance level is, and thus where performance problems are or aren't located. The approach is recognizable because the sub-approaches BSC (business balanced scorecard) and INK quality management (Institute Dutch Quality) can combine, dependant on the client context.

### Complete and Correct Management Information Essential

For active management, proper information is necessary. In our view, this information needs to be complete and correct and focused on the challenges of the organization. The management information is thus linked to the aforementioned Value Chain.

In practice, the management information is derived from different sources, like finances, HR, ICT, risk, compliance, audits, etcetera. It often happens that different organizational divisions are judging and monitoring this management information at the same time. Overview is generally hard to gain. Insight into the complete picture is only possible by creating management information linked to the Value Chain. The organization and the divisions are enabled to talk and report about the same business model, hence unambiguously improving the performance and the risk management of the organization. The software directly supports the organization with management information and a plan-do-check-act-cycle, which supports the new working methods when put in practice.

### Best Practice Content

Long lasting and intensive experience has led to the creation of a Business Best Practice model for a hospital organization within the software suite. This Best Practice model is based on the Value Chain principle and consists of dashboards for all management layers within an organization, with a direct connection to processes, and with an integrated Plan-Do-Check-Act approach. This means that the goals as specified on the dashboard

are translated to goals on an operational level. The processes are a comprehensive element of the Best Practice model and are further specified based on the client situation and the performance goals.

The connection between the software suite, EPR, and ERP health care systems offers hospitals the possibility of working from a portal. At the same time, the implementation of the software suite prevents that ERP mapping and assigning CRUD (Create, Read, Update and Delete) rights take up valuable time during the implementation. The implementation of the Best Practice model improves the security and reduces the risks and costs. Reporting to stakeholders becomes more efficient and shortens health care processes. Furthermore, all this leads to a more clever use of medical equipment and human resources.

### Step by Step: Strategic, Tactic, and Operational level

The health care model below visualizes the coherence of the chosen strategy in several steps. To do this, the Best Practice Model Hospitals is used: a blue print for the management of your hospital.

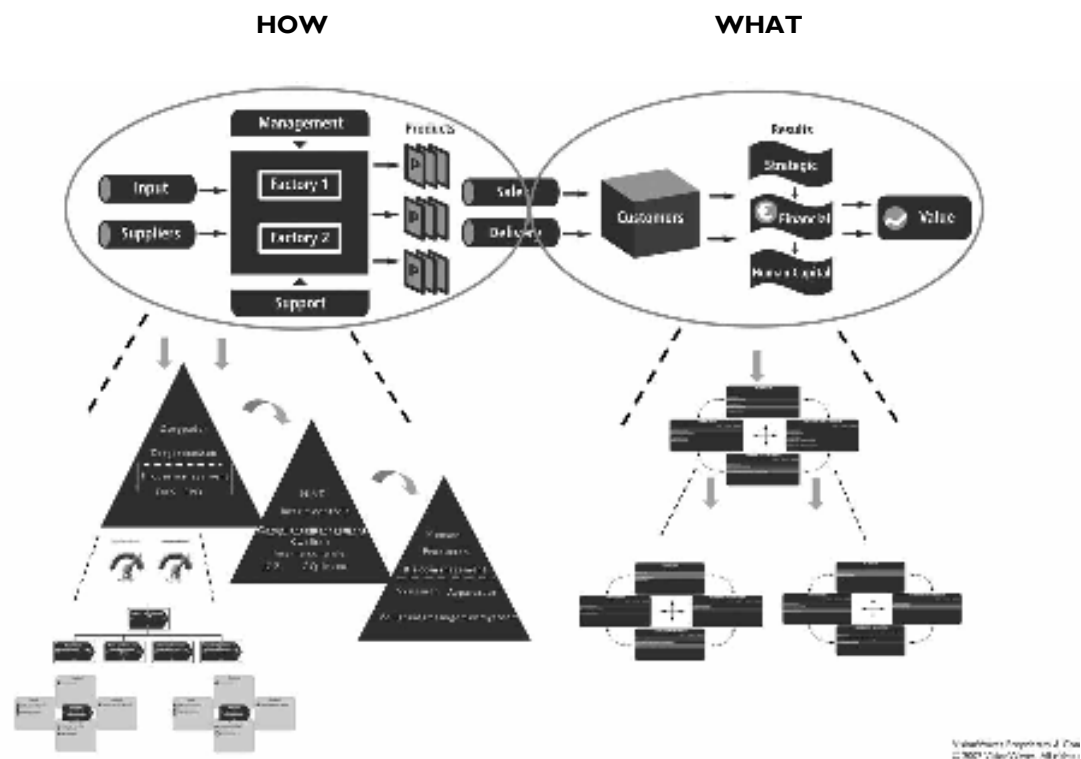


Figure 2: VisionWaves' Health Care Model

Standard approaches in the health care sector are the Value Chain, the Balanced Scorecard, the health care processes and an analysis report. The Value Chain is the starting point and the tool to create insight on a strategic level into the obtained end results and the way in which these end results have been obtained, through the right synchronization of the processes, products and clients. The Value Chain is established on the level of the Board of Directors. In the Value Chain, the most important values and results are appointed and made measurable by means of performance indicators.

The second part of the approach is the Balanced Scorecard. At this level, the strategic goals, as set in the Value Chain, are translated to Performance Responsible Units (PRU's) and the obtained results of the health care

processes are 'added up'. The Balanced Scorecard quickly provides insight into the set goals and the extent to which these goals are realized. The Balanced Scorecard provides insight in the coherence between the strategic principles at the level of a Performance Responsible Unit.

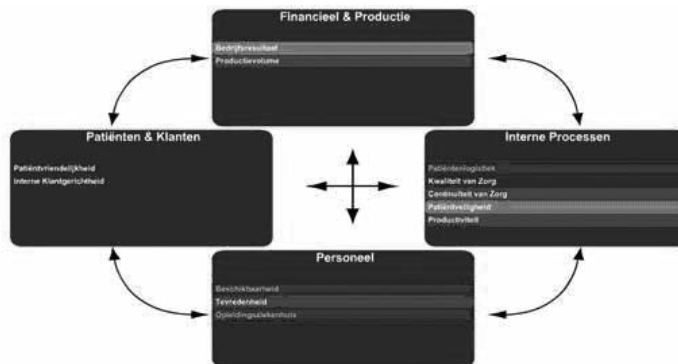


Figure 3: Balanced Scorecard.

The third element of the approach are the health care processes. Insight into and streamlining of the current health care processes is vital to realize advantages like faster treatment, improved flow of patients, and a better connection between health care demand and health care supply. In other words, the strategic results are translated to the design and streamlining of processes. This is achieved by visualizing the mutual relationships between the different health care processes and activities. Additionally, for each activity the managing and preconditioned factors are established. These may include treatment protocols, guidelines, laws and regulations, and/or work instructions. Process indicators also need to be linked to the health care processes to gain insight into the bottlenecks and the track towards improvement.

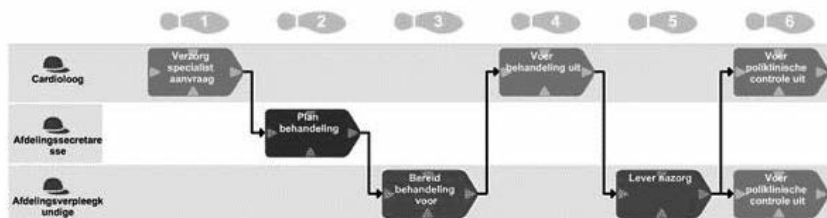


Figure 4: Health care process in VisionWaves' software.

The last part of the approach is the analysis report. In this report, the most important indicators are established and the performances of these indicators are monitored over time. Within the analysis report every performance responsible person plays an important role in monitoring the performances and formulating possible adjustment measures. These 'checks' and 'acts' are saved, so they can be viewed at another point in time, in relation to the performance. Improvements can thus also be traced back to certain adjustment measures.

## **Experience in Practice**

'Tergooi Hospitals has taken major steps towards the improvement of their comprehensive control.'

Tergooi Hospitals was founded in early 2006 after a merger between Hospital Gooi-Noord and Hospital Hilversum. The main reason for the merger was the necessity to enlarge the scale of the hospitals to bring the quality of the health care to a higher level. This was necessary because of the rise of market pressure and increasing competition in the region.

## **Goal**

In 2010, Tergooi Hospitals wants to be rated among the 5 best Dutch hospitals. To achieve this aim, the comprehensive control and management of the hospital needs to be further professionalized. The focus lies on the following topics: quality, safety, performance-orientation, process- and risk management. Tergooi Hospitals has asked VisionWaves to guide them during this process of professionalization.

## **Approach and Result**

The most important challenges of the professionalization of the comprehensive management were: being in control, being conscious of creating coherence and steering towards the top 5 based on that coherence. First of all, the Value Chain, which links the performances and the design of the hospital, was developed. Then, the so-called Health Care Cockpits were installed, which show the performances of the hospital on strategic, tactical and operational level from four different, yet related, perspectives. By means of the Health Care Cockpits (5 clusters, 32 specialties and 8 divisions), it is now possible to manage result-oriented. To improve the results that are visualized in the Health Care Cockpits, the first steps have been taken to create Health Care Tracks within the tool. With the help of software, all processes and their mutual relations are made clear and visible. During this process, attempts are made to apply the a large extent of standardization with regard to the different activities within the hospital. For every activity, input and output and management and preconditioned aspects are made clear to bring the quality, efficiency, management and risk management of processes to a higher level. To secure the aforementioned process improvement, the Health Care Tracks are implemented on the executing level, supported by the software. With securing it is meant that the Health Care Tracks are discussed within the team and that joint actions are taken (with clear responsibilities) to actually realize the process improvement. Finally, the 'islands' Health Care Cockpits and Health Care Tracks are connected and, by means of the Plan-Do-Check-Act-Cycle, the consciousness of coherence is created. After the realization of control and coherence on tactical and execution level, the hospital is able to use the Value Chain to steer the organization on a strategic level towards the top 5. The solution has the following added value:

- Workability of the strategy; concrete translation of the strategic goals to performance indicators on tactical and operational level.
- Optimum; by describing the processes unambiguously, bottlenecks and points for improvement are made clear, and actions are taken towards optimum processes.
- Insight in organization-wide coherence; coherence on all levels between the different results and their relations to the strategic goals (quality, safety, logistics, etcetera).

- Feedback; quick feedback of all results and adjustment measures is possible. Coherence between performances, adjustment measures and improvement is always clear. The PDCA-cycle is secured.

All this aims to improve service, quality, efficiency and capacity utilization, resulting in a higher patient satisfaction level.

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