



Danish National Board of Health uses SAS® Activity-Based Management to provide citizens with improved health care services without increasing costs

■ Industry

Health Care Providers

■ Business Issue

Help counties and hospitals to better understand the connection between activities, resources and budgets.

■ Solution

SAS Activity-Based Management improves efficiency and provides better operational efficiency, transparency and insight.

“With an increased focus on budgets, in the future the hospitals will have to expect not only to have to report precisely to the National Board of Health’s registers, but also to be able to explain and document all outlay in relation to the counties, and this requires an enhanced overview.”

Poul Erik Hansen
Head of the Danish National
Board of Health’s Diagnosis-Related
Grouping Office

Denmark is among the leading countries in the world in benchmarking its hospitals’ services. Using SAS Activity-Based Management, the Danish National Board of Health’s system for diagnosis-related grouping (DRG) contributes toward creating a better overview and more precise hospital budgets and fees.

The health care sector worldwide is under pressure as patients and politicians impose increasingly high demands upon hospitals – they expect the latest treatments available, shorter waiting times, increased treatment activity, high quality and hard-nosed financial management. The hospitals’ objective is to try to provide more quality benefits while increasing productivity and tightening cost controls.

In Denmark the overall annual public spending associated with hospitals amounts to around DKK 50 billion (€6.7 billion, US\$8.6 billion), and there are major perspectives involved in increasing the sector’s efficiency. One of the newer political incentives for optimising the hospital system is to link sections of the hospitals’ funding allocations directly to the hospitals’ activities. “The challenge is largely about creating opportunities to obtain more hospital output for the same money,” says Poul Erik Hansen, Head of the National Board of Health’s DRG office.

Partial charge control

The Danish hospital system has until now been primarily framework managed but, to an increasing degree, elements of charge control are being introduced into the counties’ accounts with the hospitals. This is not synonymous with a definitive end to framework manage-

ment as the fundamental financing principle, but rather a welcome productivity-promoting measure in the sector. For example, in 2002 the government placed DKK 1.5 billion (€202 million) at the disposal of the hospitals to design ways to reduce waiting lists. In 2004 it was agreed that 20 percent of all hospital budgets are to be activity-financed.

“In order to operate efficiently with charge control it is absolutely imperative to establish an overview of the hospitals’ actual cost structures and to create transparency and insight right across the organisations,” Hansen says.

Denmark is one of the few countries where treatment costs are best benchmarked. The DRG System was employed for the first time in the year 2000 as a basis for treatment payments of intercounty free-choice patients. It has subsequently been used as a tool for changing the financing of the hospitals, which has been carried out to comply with the government’s wish to give more money to those hospitals that are most effective and accomplish more. The system covers both in- and outpatients.

Denmark on the frontline

In essence, the DRG system sorts patients with 12,000 different diagnoses into some 588 illness groups, within which the patients have a more or less uniform illness and treatment pattern.

For each illness group, a DRG charge is calculated as the average financial charge per patient. It indicates the price that a county can require to treat patients from other counties and is also used for the payment for additional

activities in connection with activity-financed budgets. The DRG charge is comprised of a fixed, basic charge for such things as bed, care and food in the relevant type of department, and of a range of more variable costs related to the use of resources for activities such as X-ray, scanning, laboratories, blood bank, operations, physiotherapy and more.

“The United States has worked with DRG for more than 20 years, while the development in Denmark only started a few years ago. But we are well advanced with online reporting and direct access to registers, cost data-bases and electronic guidance. All the parties have benefited from the development of the DRG system. Counties and hospitals have gained new knowledge regarding the connection between activities, resources and finance. It is absolutely crucial for local control and planning,” says Hansen, who is also a member of the board of the international DRG committee.

Crucial control tools

The Danish National Board of Health’s task is to support and carry out the executive political decisions. The DRG system must be flexible and able to cover all the accounts relating to treatment of patients irrespective of future structure, while the charge system must underpin the correct incentives in the hospital sector. “The politicians wish to make decisions against a background of facts and we need to create an overview of the actual cost structure in the hospital system, and in this regard SAS Activity-Based Management is a crucial tool,” says Hansen.

Activity-based management, which is based on activity-based costing analyses, is a management concept that focuses upon controlling and prioritising activities aimed at improving

efficiency. The core of SAS Activity-Based Management is an activity-based analysis that links together direct and indirect costs hidden in the finance system with specific activities or processes. It affords – right across the organisation – the opportunity to see which parts of the costs are included in a given service, and how these costs influence the accounts.

Active benchmarking

The Danish hospitals register all activities and report to the National Board of Health online each night. By the very next day, the hospitals have a calculated production value returned to them. Once a month, the hospitals receive an overview that shows whether they have achieved their target in relation to the government’s requirements.

The DRG system helps the hospitals locally to control their budgets by supplying updated, real-time information regarding relevant activities, resources and financial data. It can also calculate such things as contribution margins.

“Today all Danish hospitals have access to information online. Each hospital is able to compare its own outlay level for certain forms of treatment with the DRG charge, or with that of other hospitals. This form of benchmarking affords the opportunity to discover potential savings and learn from others’ best practices,” says Hansen.

Clear savings that have resulted from benchmarking include improvements to supplier agreements. But the treatment procedures can also be optimised through learning from other hospitals. “Benchmarking is of crucial importance,” explains Hansen. “The transparency of the DRG system has opened the politicians’ eyes to the fact that not all hospitals can necessarily do everything. In certain counties, specialists are now

brought together in the hospitals that are the most cost-effective in the respective areas. For example, obstetrics is perhaps the focus at two hospitals, while hip operations are undertaken at a third.”

Precise calculations

“The requirement that the Danish National Board of Health’s calculations be precise has increased sharply,” continues Hansen. “If we do not contain the costs correctly, then that will exert direct influence on the hospitals’ budgets. The National Board of Health is continuously maintaining a close dialogue between counties and hospitals in order to adapt data, groupings and reports to the actual conditions.

“The hospitals can advantageously adopt the activity-based costing method as a principle. With an increased focus on budgets, in future the hospitals will have to report precisely to the National Board of Health’s registers, but also to be able to explain and document all outlay in relation to the counties, and this requires an enhanced overview.

“It is a complicated process to gather the correct data in the right manner, and not all the hospitals submit their reports uniformly yet. But the aim is that, by the spring of 2005, all known inexpediencies will have been removed. This will give rise to an excellent factual basis for political decisions whereby we achieve comparable results,” concludes Hansen.

The next step includes looking to work qualitative measurements into the system. This is already in operation in the United States, where research is aimed at achieving the best quality possible for the money.