

Aarhus University Hospital Enhances Patient Care through Customized Scheduling and Booking

Bookplan from Capgemini helps the hospital improve resource management and boost transparency

The Situation

Before implementing bookplan, the cardiology unit at Aarhus University Hospital (AUH), Skejby, used to follow a manual process to schedule and book patients' treatment in the unit. There were many resources to keep track of at the same time, and if a patient's course of treatment was changed, the nurses at the laboratory had to manually update the new times in multiple systems. With 165 different types of examinations and 18,000 patients admitted annually, including many emergency hospitalizations, work scheduling had become highly complex.

"We had overlapping systems, and there was no automation between the systems," explains Hanne Dalsgaard, who was the strategic coordinator for the bookplan project and who, until recently, had been head nursing officer in the department for 26 years. She

points to the risk of wasted time and resources owing to undetected holes or overbooking in the daily work flow.

AUH wanted to enhance efficiency, and since the department was also in the process of adopting a new EHR, the introduction of a new booking system would help the cardiology unit take the initial steps in the overall implementation project.

The Solution

The Cardiology Department is the first at Skejby to implement bookplan, an IT solution developed by Capgemini Denmark over the past ten years in cooperation with clinicians. Bookplan has been chosen as the booking system for all hospitals in the Central Denmark Region and



People matter, results count.

functions as a module in the region's joint EHR.

In the system, the examination programs for the various rooms are divided into different time slots, where some rooms can be booked far in advance, some two weeks in advance, others 72 hours in advance or immediately. This way, patients are scheduled in the calendar based on the medically feasible waiting time and capacity, leaving enough room for emergency use. The system can take into account vacation and training days when there is lower capacity in operating rooms and bed units.

The Result

"We have now got an electronic solution that ensures our patient flow through the system and facilitates scheduling," says Dalsgaard. When the patient is referred or admitted, their data is entered into the system just once, and that data follows the patient throughout the department.

She points to the fact that scheduling has become better coordinated, and resource management between the Cardiology Laboratory and the bed unit as well as between the different groups of staff and resources has improved. The system is constantly updated online, reflecting changes immediately. "It already looks as if we have got better scheduling and production, shorter waiting lists and we can use our resources more appropriately," says Dalsgaard.

Bookplan has also shifted the overview from one person to everyone in the department. Doctors often look at daily programs and admittance lists. Patients can immediately get an appointment for a coherent course of treatment, and that translates into calmer daily routines for nurses and secretaries who schedule and execute the daily program.

How AUH and Capgemini Worked Together

Capgemini leveraged bookplan, its specialized booking and coordination system for hospitals as a solution at AUH. The solution which has been in use since 1995 was an appropriate fit for AUH's

requirements as it extended a broad range of advanced and tested standard functions. Capgemini also brought in extensive experience, as the solution had already been implemented across 200 Danish hospital departments and adopted by nearly 10,000 users. The solution provides a central planning module and a large screen solution that shows the schedule of treatments and allows medical staff to make changes to it very easily.

The configuration of bookplan was done by Capgemini in close collaboration with the department's doctors, nurses and administrative staff, to ensure a system that is tailored to the department. "We have done a lot of the prep-work and ensured coherence. I was skeptical, because our needs are so complex, and I doubted at first whether scheduling could be joined in a single IT system. But it could, and I am very positive," says Dalsgaard.

It took a couple months to prepare the system's configuration, but the switch from manual to electronic planning took place

over the course of a weekend, where 670 patient appointments from the old paper system were entered into bookplan on a Friday and Saturday. To train medical secretaries and coordinators, the department and Capgemini put together a bookplan training plan based on a series of practical tasks of relevance for the department.

"We have received great support from Capgemini. They have been on the sidelines, helping with training and explaining all the details in bookplan, as well as participating in all configuration meetings," explains Dalsgaard.

Several other departments at Skejby are in the process of configuring bookplan, and will be implementing it soon. Once that is done, it will be easier for the hospital to deliver cross-departmental scheduling. The Cardiology Laboratory, for example, will be able to see whether a patient has had the relevant blood tests done, if they have had an ultrasound, if they have appointments elsewhere in the hospital or at one of the other hospitals in the region.



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Health Sector
 Application Development and Maintenance
 Bookplan

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Aarhus University Hospital, Skejby is located in Aarhus, Denmark. It serves as a basic hospital for Aarhus City, and regional hospital for

Aarhus County and the west-Danish regions, and as a national hospital for specific diseases.

For more information, please visit:
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