

# Case Study – Avesta Municipality

*Optimization of resources within the care of the elderly, to gain productivity, at Avesta Municipality.*

The home-help service within Avesta municipality manages the care of the elderly that have been allotted assistance and aid. This aid can vary from a few hours per month for shopping and cleaning, to several hours a day for help with personal hygiene, feeding and medication. The aim is to help elderly and disabled citizen with daily tasks, so they can remain living in their own homes for as long as possible. The home-help service performs and carries out the decisions about assistance that has been granted by the municipality.

At Avesta municipality approximately 250 persons are employed within the home-help service. They serve and care for about 625 care recipients.

## The Challenge

There are always ongoing projects to save money within the municipality. Most areas managed by Avesta municipality had made cut downs but not within the home-help service area. The budget set for the care of the elderly was not sufficient, so requirements on cut downs were a must. One way of achieving this was investing in a new system. Avesta was looking for a system that could measure operations, but also to help make the planning and execution of assistance more efficient.

By implementing a system Avesta municipality estimated to save approximately 3 MSEK yearly in personal reduction. This would be possible to achieve thru more efficient planning and scheduling of the resources, and by that gaining more time with the care recipients.

The target was to have 70% of the personnel's time on site at recipients, and the rest for travel, administration etc.



## The Solution

Avesta municipality had already implemented a system from STT System, regarding care registration and security and safety for elderly citizens. With care registration the social worker records the tasks that have been performed at the care recipient, and also the time and date for these activities e.g. cleaning, shopping. By this time a need for resource planning occurred, so to be able to best match assignment times, competencies, travel

STT could offer a solution, TES, for optimal planning and scheduling, as a complement to the system already installed. TES includes Blå Optimizer, an optimization engine from isMobile. By utilizing the functionality within Blå Coordinator, all assignments and tasks regarding care are planned and scheduled using several parameters and constraints. The major parameters are travel route, number

of personnel available, number of visits, competence needed for the assignment and if double manning is needed.

The optimization engine generates a proposed schedule, usually the coming week's assignments. This weekly schedule is then adjusted continuously, depending on absence, new assignments and if more or less resources are available. At the start of each day the definite schedule is handed out to the personnel. Even rescheduling between different groups of personnel can be done due to work load. The largest efforts are needed in the mornings and evenings.

The home-help service personnel are divided into geographical groups, where two persons per group are working with planning and scheduling, in total 20 employees. In addition all employees can access and view their planned schedules, as well as management can access different reports and statistics. All in all about 250 persons are affected by the system.

TES is a user friendly system, where most operations and screens are clear and simple. "It should be fun to work in the system" was an issue that Avesta prioritized in the purchasing phase.

### **Benefits**

Avesta municipality is very satisfied with the savings that have been made possible due to implementing the system. "the estimated savings of 3 MSEK on a yearly basis was outperformed with a wide margin, and reached approximately 7,2

MSEK" says head of home-help service, Annika Strand.

"Among other gains with the system is the insight in operations, especially the possibility to follow-up on planned assignments and visits, as well as seeing the performed and invoiced time at the recipient compared to planned revenues", adds Annika Strand.

Also security is improved, as the different assignments and other tasks being performed are easy to account of. A choice of selected reports and statistics are made available, making information regarding what tasks are most common, how long they take to perform etc accessible and also a better basis for future planning. The planning and scheduling of the weekly or daily tasks only take a fraction of the time compared to the old manual way.

### **Future Thought**

The statistics gained in the system about the operations, can be a very good fundament for future purchase of private subcontractors, something that is being more commonly used within municipalities

The time and tasks recorded can be used as a basis for invoicing of performed work. Work is invoiced up to a certain maximum level. Also, with implementing a system it will be easier to recruit more personnel, as the status of the work as social worker increases.