**DNV** Imatis

# Bed Management and Capacity planning

In light of the escalating demands for healthcare efficiency driven by factors such as rising patient volumes and resource constraints, the imperative for a comprehensive real-time bed and capacity management system has become increasingly apparent. Recent reports highlight productivity increase of 15-20%, attributed to the system's ability to bridge the gap between bed availability and patient occupancy. <u>DNV Imatis' eBCMS</u> is a solution that harnesses real-time data to provide precise, up-to-the-minute insights into hospital and community operations, offering a tested reality that goes beyond theoretical frameworks.

# **Enhanced hospital workflow**

Consider the possibilities of being much better prepared for how the next 24 hours will be, freeing up nurses' time, and precise planning of staff and resources. DNV Imatis has a proven track record, with a large health region in Norway reporting remarkable productivity gains of 15-20% through our bed and capacity management system solution.

#### **Optimal resource utilisation**

Realise better productivity and reduce gaps between bed availability and patient occupancy by effectively managing and optimising the allocation and utilisation of beds. Involves coordinating and overseeing the availability, assignment, and discharge of patients to appropriate beds throughout their hospital stay.







"Since we introduced digital collaboration boards, we have had a completely different overview of operations from early morning. We're able to manage resources much better, with a complete overview of the ward patients in real time."

Quote Elisabeth Mjøs, Ward Manager, Haraldsplass Diaconal Hospital, Norway

## Key components of eBCMS

- **Planning:** Obtain a comprehensive snapshot to foresee the upcoming 24 hours, facilitating precise resource planning.
- **Custom applications:** Achieve seamless access to real-time data with tailored applications for wall screens, PCs, and mobile devices.
- **Task Management:** Enhance collaboration between clinical staff and support services teams.
- **Real-time monitoring:** Gain real-time insights into key performance indicators, waiting times, and bed occupancy. "Having a better overview of users and entry/exit dates has resulted in reduced length of stay, and improved bed management." Quote Lillesand community, Norway



An example showing the overview of bed status, where data is collected and aggregated by integrations with third party information systems.

# Tools for a more agile workday

- Overview application for wall screen or pc: Provides a real-time overview of the status of bed planning for a specific ward.
- Bed management dynamic application for pc: Allows you to make changes and manage the allocation of beds.
- **Mobile application:** Displays current patient information along with their planned discharge date. It is easy for clinicians to update, requiring just a few clicks. This functionality is applicable across all mobile devices.
- Bed Management report application: A bespoke tool that generates insightful reports, offering comprehensive statistics on the registered data.



### Interoperable and integrated

<u>DNV Imatis' Flow</u> solution integrates seamlessly with our mobile apps and messaging system, patient portal, self-registration, and patient queue management solution through digital whiteboards. The Flow solution can interoperate with the hospital's patient administration system and electronic patient records (PAS and EPR), providing support for process automation and enabling access to information from multiple systems from one place.



# **Case Studies**

#### Østfold Hospital

Østfold Hospital, located southeast of Oslo, Norway, opened in 2015 a new hospital. The hospital has 5,000 employees, 630 beds and 21 operation rooms. In 2017 they received HIMSS level 6 certification as the first hospital in the Nordics. DNV Imatis has been a key supplier of information technology to the hospital. Almost all hospital employees use the solutions daily to support their work processes through 180 large displays, more than 1800 smart phones and several desktop computers and self-check-in kiosks.

The hospital has now got a better overall overview of the occupancy rate and can more easily predict how the next 24 hours will be. Watch <u>the video testimonial</u>.



#### **Oslo Emergency Clinic**

The emergency clinic is located in Oslo, Norway. With 72 beds spread across three wards, the need for streamlined operations became apparent. Conducted by the Norwegian Research Centre, SINTEF, thorough analyses were carried out before installation, midway through the process, and several months post full-scale operations.

Tangible results:

- A 28% reduction in man-years per patient
- A 20% reduction in personnel costs per patient
- Over 90% of patients reported high satisfaction
- Improved well-being and reduced sickness absence

Read <u>the case study</u> that emphasises the importance of real-time information.



Want to learn more?