HOSPITAL OPERATIONS CENTRE

Powered by Analytics to Improve Capacity and Enhance Patient Experience
IMPROVE HOSPITAL OPERATIONS WITH AGIL™

AGIL Hospital Operations Centre (HOC) unifies actionable analytics with streamlined workflow and maximises capacity utilisation for hospitals to enhance and elevate patient experience.

Coordinated workflow
Connect disparate silos into a single streamlined process to reduce patient waiting time for faster bed turnaround

Optimise staff productivity
Use of automation and digital tools to streamline workflow and processes, improved staff collaboration and satisfaction

Improve existing capacity utilisation
Reduce costs and improve efficiency with smarter utilisation of beds, devices, equipment and manpower

Smart hospitals maximise their existing assets with smarter patient care workflow.
Global health trends are placing greater pressure on hospitals to optimise their capacity and improve efficiency.

**CHALLENGES**

Many healthcare institutions struggle to cope with increased healthcare demand – costing billions in waste due to inefficiencies and causing delays to care. Furthermore, healthcare cost is rising at a pace that is increasingly unsustainable.

<table>
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<th>Number of people aged over 65 to rise to more than 686 Million or 11.8% of the total population by 2023¹</th>
<th>Chronic diseases is expected to rise by 54.7% to 642 Million by 2040 globally¹</th>
<th>Global health care spending is projected to increase at an annual rate of 5% in 2019-2023¹</th>
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**Longer patient wait time**

On average, a hospital wastes 33 minutes during patient admissions, 40 minutes in the emergency department and 35 minutes in patient transfers, costing $1.7 million per year²

**Labour crunch**

The World Health Organisation predicts a nursing shortage of 12.9 million worldwide by 2035³

**Bed crunch**

Hospitals have been setting up temporary beds and/or transferring patients to other hospitals due to the lack of available beds

Sources:

¹ Deloitte 2020 Global Health Care Outlook
² The Ponemon Institute
³ World Health Organisation
High-performing healthcare providers unlock efficiencies from their existing resources and 
**enhance the patient journey** from admission to discharge.

**ACCESS**
- **Inpatient Ward (Patient Entry)**
  - Faster bed assignment after admission

**Transfer and Admission**
- Reduce wait time at Emergency Department

**Operating Theatre**
- Improve operating theatre utilisation
- Reduce transfer delays to inpatient Wards
- Improve operational efficiency with pre-active pre-surgical planning, scheduling and equipment tracking

**Inpatient Ward (Ongoing Care)**
- Speed up patient transfer after bed is assigned
- Forecast bed availability by integrating scheduling and admission

**Bed Turnaround**
- Improve bed utilisation rate and alleviate bed crunch incidents

**POST-ACUTE CARE PLACEMENT**
- Efficient discharge process and integrated bed scheduling optimises patient flow and transfers

**THROUGHPUT**

**DISCHARGE**
KEY FEATURES

Hospital Operations Centre drives a more collaborative hospital environment to enhance the entire patient journey.

**Patient Flow Management**
- Integrated assets status display of beds, staff and patients within the hospital for patient journey management
- Patient flow analytics for capacity/performance tracking (e.g. delays, bottlenecks)

**Video Content Analytics**
- Detects unauthorised parking that may obstruct ambulances and other emergency vehicles
- Intrusion alerts for security and infection management
- People counting and crowd detection for people and infection management

**Staff and Asset Monitoring**
- Equipment/asset movement monitoring for reduced delays and inventory levels
- Staff movement monitoring for care quality analytics (e.g. hygiene monitoring to avoid or trace infections)

**Analytics**
- Asset scheduling and optimisation (beds, operating theatres, X-rays etc.)
- Case load forecasting
- Inventory optimisation
- Patient load balancing
- Workforce scheduling and optimisation

Better patient flow improves bed availability

A hospital with **800 beds** and about **6,500 staff** that serves **500,000 to 600,000 patients** annually, optimised all care delivery support process with smart technology and sensors, to deliver the highest standards of patient care. Beds are ready for the next patient in 35 minutes, cancelled operations due to bed unavailability are **down 63%** and A&E breaches due to lack of beds are down from **53% to 13%**.