SERIS® HOSPITAL OPERATIONS COMMAND CENTRE

Focus on what matters most

To improve efficiency and optimise capacity, hospitals need to get the right patients to the right beds at the right time.

Coordinated workflow

Connect disparate siloes 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**.
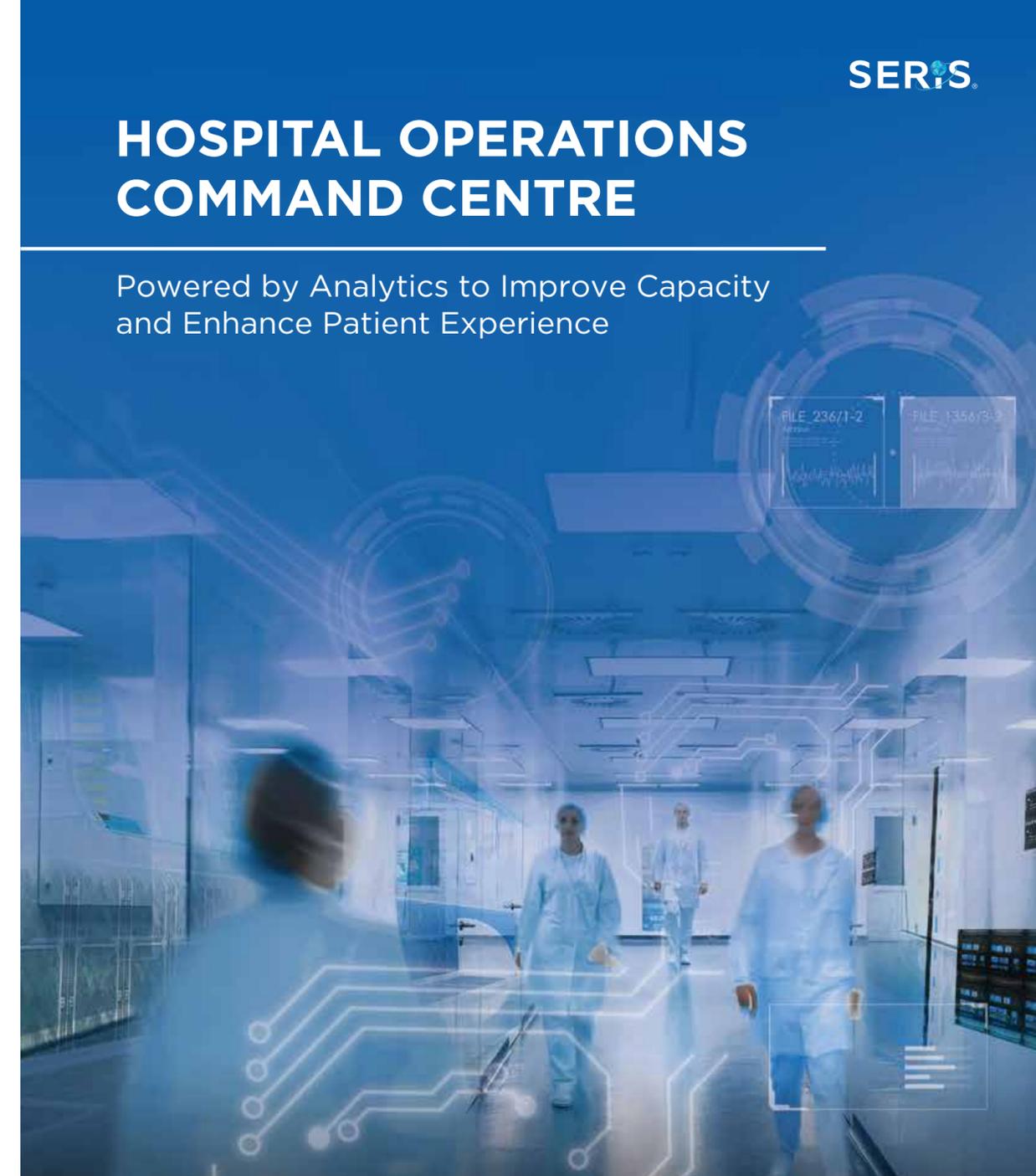
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SERIS

HOSPITAL OPERATIONS COMMAND CENTRE

Powered by Analytics to Improve Capacity and Enhance Patient Experience

ST Engineering

CHALLENGES

Global health trends are placing greater pressure on hospitals to optimise their capacity and improve efficiency.

Number of people **aged over 65** to rise to more than
656 Million
or 11.5% of the total population by 2021[1]

Chronic diseases is expected to rise by 54.7% to
642 Million
by 2040 globally[1]

Global health care spending is projected to increase at an annual rate of
4.1% in 2017-2021[2]

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.

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 year[3]

Labour crunch

The World Health Organisation predicts a nursing shortage of 12.9 million worldwide by 2035[2]

Bed crunch

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

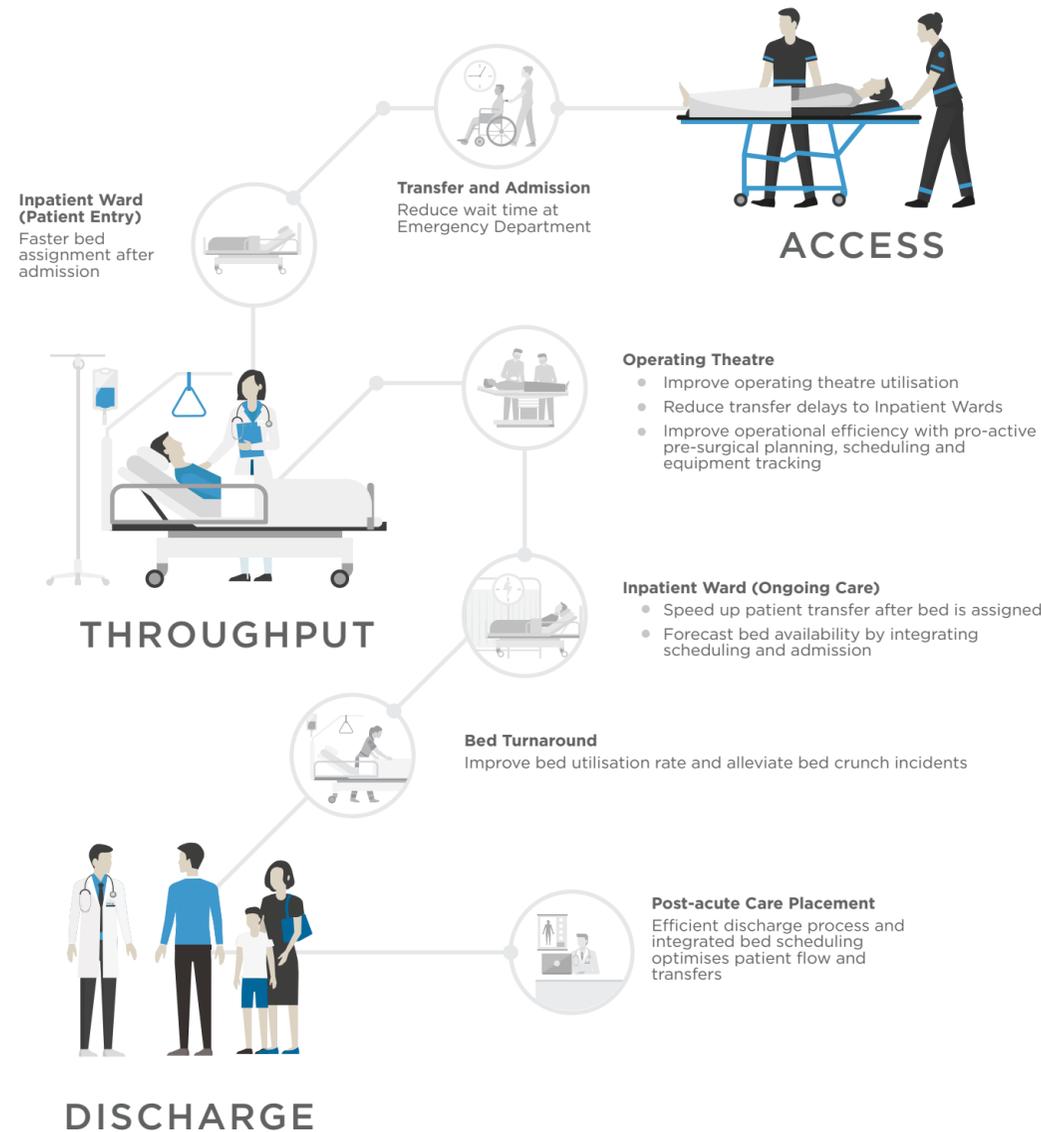# IMPROVE PATIENT FLOW AND INCREASE OPERATIONS EFFICIENCY

High-performing healthcare providers unlock efficiencies from their existing resources and **enhance the patient journey** from admission to discharge.

ACCESS

Transfer and Admission
Reduce wait time at Emergency Department

Inpatient Ward (Patient Entry)
Faster bed assignment after admission

THROUGHPUT

Operating Theatre
- Improve operating theatre utilisation
- Reduce transfer delays to Inpatient Wards
- Improve operational efficiency with pro-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

DISCHARGE

KEY FEATURES

Hospital Operations Command 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 reduced 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%**.