



Healthcare
Management:
Strategy, Technology &
Operations

September 15 - 19, 2025

# HEALTHCARE MANAGEMENT: STRATEGY, TECHNOLOGY & OPERATIONS

Creating a patient-centric healthcare organization demands a deep understanding of patient expectations, effective resource management, and the complexities of operational dynamics. Successful organizations achieve this by balancing diverse resources, coordinating a seamless supply chain, and adeptly managing change. This task is further complicated by rising patient expectations, increasing cost pressures, and stricter regulatory compliance. Simultaneously, advancements in healthcare technology offer expanded opportunities for treating diverse conditions, delivering precise and personalized care. In this context, this Management Development Program on Healthcare Operations Management is designed for healthcare professionals and administrators in leadership or administrative roles, including doctors, nurses, department heads, and executives overseeing operational units. This program focuses on understanding the interrelationships between healthcare resources and operational units, equipping professionals with the ability to coordinate resources and processes, control costs, and maintain the highest standards of treatment quality. It also explores how to leverage advancements in healthcare technology to deliver exceptional patient care and experiences.





- Understand and articulate patient-centric care, map patient journey, and develop strategies that maximizes patient outcomes.
- Gain an in-depth understanding of the strategies for managing healthcare supply chain, capacity planning, and resource scheduling and allocation to meet patient demand effectively.
- Build clarity on the requirements of regulatory compliances and apply quality management theories and frameworks for improving treatment quality, patient safety, and clinical outcomes.
- Develop digital transformation strategies for leveraging digital technologies to support patient-centric care and enhance operational efficiency.
- Learn to utilize data analytics and AI tools for improving operational efficiency, predicting patient needs, improving quality of treatment, and delivering personalize care.





## **Course Content:**

### **Module 1: Introduction to Healthcare Operations**

- Economics of Healthcare Operations: Measures of productivity and effectiveness of healthcare services, estimating throughput, delays, cycle times, and resource utilization
- · Healthcare administration, regulations, and patient care
- Design & analysis of healthcare processes: flowcharting, Gannt charts, process blueprint, value stream mapping, work measurement and analysis
- · Constraints, bottlenecks, and capacity management in healthcare operations

### Module 2: Healthcare Supply Chain

- Building perspectives on patient-centric healthcare supply chain
- · Understanding supply chain flows and processes, supply chain costs
- Inventory management, forecasting & demand supply mismatch
- Bullwhip effect & supply chain coordination
- · Supply chain risk management

### Module 3: Healthcare Process Optimization & Analytics

- Healthcare decision problems & optimization:
  - Scheduling problems: nurse scheduling, operating room scheduling, appointment scheduling
  - Resource allocation & optimization: bed allocation problem
  - · Inventory optimization
- Tools & techniques for analyzing healthcare data: Data collection, Descriptive statistics, visualization and reporting
- Predictive analytics: clustering, regression, machine learning, natural language processing
- Al-enabled decision making

### Module 4: Quality Management, Patient Safety, & Service Excellence

- · Healthcare quality standards and business excellence frameworks
- Quality management systems & philosophies
- Lean operations & six sigma in healthcare
- Patient Safety Implementation Framework, Safety risk assessment and tools, Safety culture

#### Module 5: Digital Transformation and Patient-Centric Healthcare Operations

- Healthcare Information System
- Digital Transformation Strategy for Enhancing Patient Experience & Quality of Care
- Change management & technology adoption
- Technology-assisted patient care, telehealth
- Healthcare Asset Management

## **Pedagogy:**

The programme consists of classroom discussions, and case studies. The programme will cover various analytical and innovative tools that can be used for managing healthcare operations. Case studies will focus on learnings from best practices and synthesizing approaches to better manage healthcare operations in public as well as private hospitals.



## Participant background:

The program is aimed at healthcare professionals and administrators in leadership or administrative roles, including doctors, nurses, department heads, and executives overseeing operational units. Public health officers, policy makers, and healthcare consultants would also benefit immensely from the program.

## **Programme Fee:**

Rs. 90000 (Residential),
Rs. 80000 (Non-Residential).
GST @ 18%



## **Facilitators:**



Prof. Ashutosh Sarkar
Professor, Quantitative Methods and
Operations Management

Prof. Ashutosh Sarkar received Doctor of Philosophy from Indian Institute of Technology (IIT) Kharagpur and was a Fulbright Visiting Scholar at University of Texas at Dallas. He has extensive experience in executive education and served as consultants to many private and public sector enterprises including Government of Kerala, Suzuki Motor Corporation, NALCO, and ULCCS Ltd. His areas of expertise include inventory and supply chain management, purchasing and supply risk management, applied optimization, and socially responsible operations management. Prof. Sarkar has published in many academic journals including in Financial Times list of 50 top management journals. His research has received international awards and been cited extensively. He was also elected as the national council member of the Indian Institute of Industrial Engineering and nominated as independent member of the Society of Operations Management. He is also serving as the Secretary of Asset Management Society of India.



Prof. Arqum Mateen
Associate Professor, Quantitative Methods
and Operations Management

Prof. Argum Mateen is with the Quantitative Methods & Operations Management area of IIM Kozhikode. He is a Fellow (Ph.D.) of Indian Institute of Management Calcutta, where he was the recipient of Satish K. Sehgal Doctoral Student Award for Scholarship and Organizational Citizenship. He has worked in energy, information technology, and pharmaceutical industries. He has trained managers and senior executives from some of the most reputed Indian and international organizations, including several Fortune 500 companies. His research, teaching, and training interests include understanding business models, the role of technology in business and supply chains, strategic role of operations and marketing in establishing sustainable competitive advantage, as well as capability development in organizations and value chains. He has published several cases, and his multiple award-winning research has been published in many reputed international journals like Decision Support Systems, Decision Sciences, Transportation Research Part-E, Annals of Operations Research, Marketing Intelligence and Planning, International Journal of Production Research etc.

## **Cancellation Policy:**

Joining instructions will be sent to the selected candidates 10 days prior to the start of the programme. Kindly do not make your travel plans unless you receive the confirmation email from IIM Kozhikode. If the programme is cancelled, the participants or the sponsoring organization will have the option to either get the fee paid by them adjusted against any other future management development programme(s) of the Institute or get a refund. IIM Kozhikode will not be liable for any other expenses incurred by the organization or the participant. Also the transaction fee will not be refunded.

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