

REPORT

ON

MANAGEMENT DEVELOPMENT PROGRAMME

# Healthcare Operations Management “Techniques & Applications”

(17th – 21st March 2015)



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Programme Coordinator & Faculty**

**THE IIHMR UNIVERSITY**

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**Institute of Health Management Research, Jaipur**

# Healthcare Operations Management “Techniques & Applications”

(17th – 21st March 2015)

A five day Management Development Programme (MDP) on “Healthcare Operations Management: Techniques & Applications” was organized at IIHMR University, Jaipur between 17<sup>th</sup> -21<sup>st</sup> March, 2015.

Operations management is the design, operation, and improvement of the processes and systems that create and deliver the organization’s products and services. The goal of operations management is to more effectively and efficiently produce and deliver the organization’s products and services. Manufacturing organizations have successfully employed the programs, techniques, and tools of operations improvement for many years. Recently, leading healthcare organizations have begun to employ the same tools. The objective of this MDP was to apply operations management **philosophies, techniques, and tools** in healthcare for making the healthcare delivery efficient and effective.



In this programme, the participants were from **Healthcare Global (HCG) Enterprises Ltd., Bangalore, (leader in cancer care in Asia)**, **Dr Shroff Charity Eye Hospital, Delhi (Oldest Eye Hospital in Delhi)**, **The International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)**, **International health research organization located in Dhaka, Bangladesh, Seth Nandlal Dhoot Hospital (run by VIDEOCON INDUSTRIES) Aurangabad, Maharashtra, India, (leading multi-super speciality Hospital in Maharashtra)**, **Ministry of Public Health, Islamic Republic of Afghanistan (Sponsored by WHO Regional Office for Eastern Mediterranean)**, and the **Directorate of Health Services, Ministry of Health & Family Welfare, Govt. of Chhattisgarh. In all there were 15 participants.**

**Dr. Susmit Jain, Assistant Professor, IIHMR University, was the faculty and the programme coordinator.**

## Some of the techniques that were discussed and demonstrated through Case Study / Exercises

- PROJECT MANAGEMENT
  - The Gantt Chart
  - Program Evaluation and Review Technique (PERT) in healthcare project management.
  - Critical Path Method (CPM) in hospital projects.
  - Project Cost Analysis
- RESOURCE ALLOCATION THROUGH LINEAR PROGRAMMING.
  - Nurse Scheduling with Integer programming
  - Applications of LPP in Assignment and Transportation problems
- FORECASTING TECHNIQUES
  - Delphi, Jury of Executive Opinion, Naïve, Time Series, Techniques of Averaging, Moving Averages, Weighted Moving Average, Exponential Smoothing, Trend Analysis, Accuracy of Forecasts, Tracking Signal.
- LOCATION METHODS
  - Cost Profit Volume Analysis for healthcare,
  - Factor Rating Method,
  - Center of Gravity Method,
  - GIS in healthcare,
- LAYOUTS DESIGNING
  - Product Layout,
  - Process Layout,
  - Systematic Layout Planning,
  - Method of Minimizing Distance and Costs,
  - Computer based Layout Programs,
  - Fixed Position Layout, Exercises.
- SUPPLY CHAIN AND INVENTORY MANAGEMENT
  - Group Purchasing Organizations (GPO's), E-distributors
  - Just-in-Time (JIT) and Stockless Inventories,
  - Universal Product Codes (UPCs),
  - Inventory Classification systems,
  - A-B-C approach,
  - VED/VEN approach for hospitals,
  - Economic Order Quantity (EOQ) Model,
- QUALITY IN HEALTH CARE
  - Monitoring variation through Control charts in hospitals,
  - c-chart, p-chart, mean –range charts,
  - Investigation of Control Chart Patterns, Run - Based Pattern Tests, Zone Tests,
  - Process Improvement, Quality Circles “Kaizen Teams”, Benchmarking,
  - 7QC Tools
    - Cause-and-Effect Diagram,
    - Check Sheet,
    - Control Chart,
    - Histogram,
    - Scatter Diagram,
    - Flow Chart and

- Pareto Diagram, Applications/Exercises in hospitals.
- QUEUING MODELS AND CAPACITY PLANNING
  - M/M/s,
  - M/M/s>1,
  - Using Excel templates for solution,
  - Capacity Analysis and Costs,
  - Applications/Exercises in hospitals.

**PRACTICAL EXERCISES WERE DONE USING SOFTWARE FOR DECISION SCIENCES / MICROSOFT EXCEL**



**The participants attending the programme**

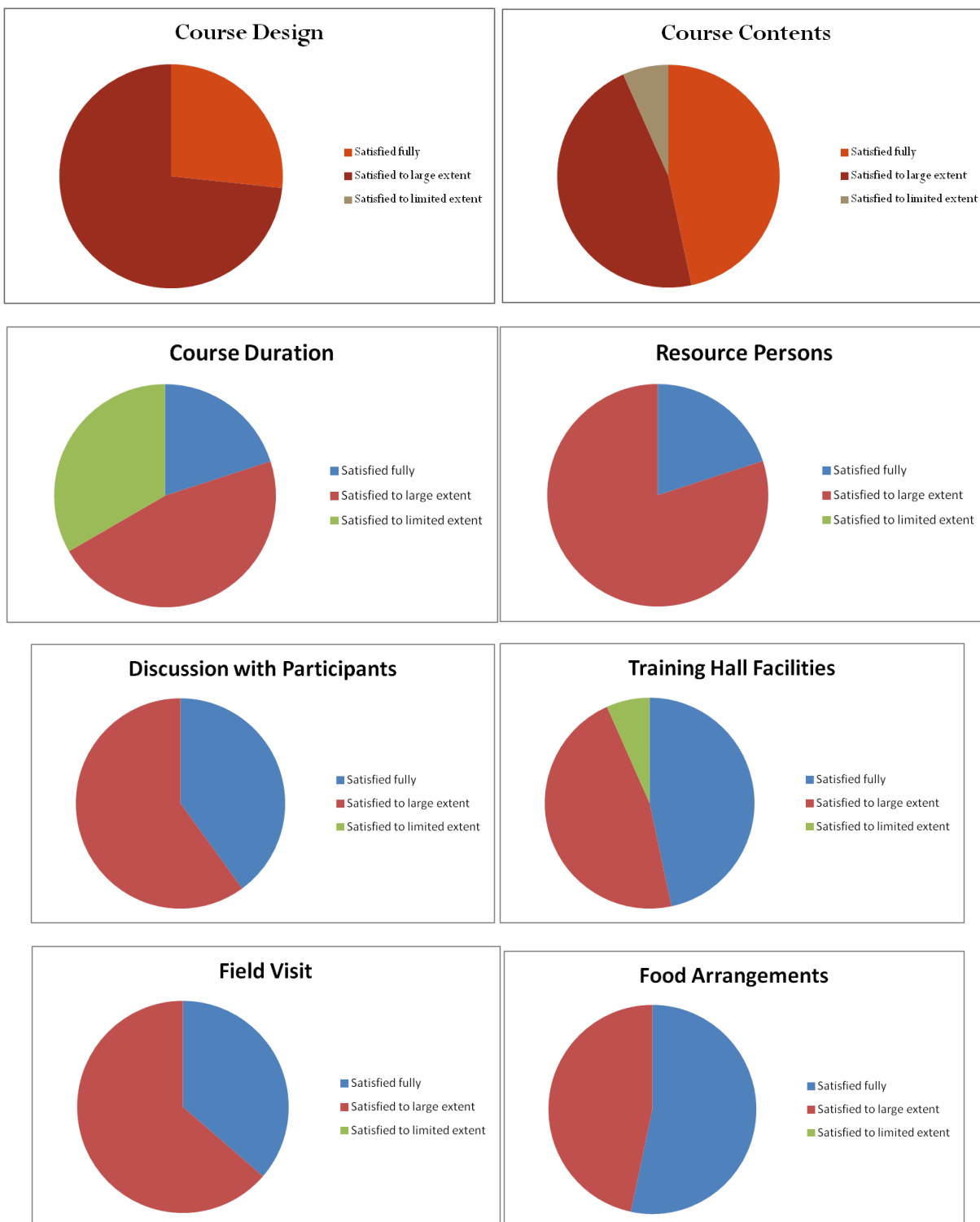


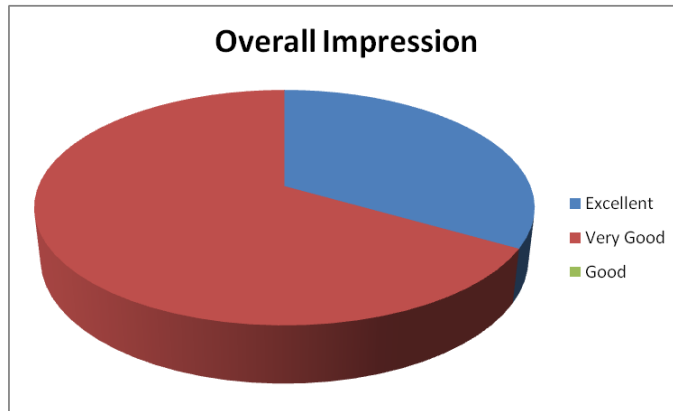
**The participants attending the programme**

## PROGRAMME SCHEDULE

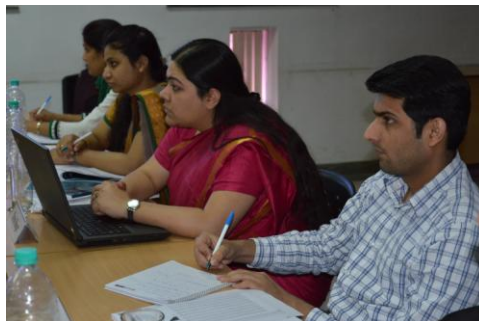
TIME	09:30-10:00	10:00-11:15	11:30-13:00	13:00-14:00	14:00-15:15	15:30-17:00	
Monday 16.03.2015	Arrival of the participants - Refreshing from journey [Achal Singh]						
Tuesday 17.03.2015	Registration & Campus walk  [Ashok Mathur]	Ice Breaking <b>Mr. Saumitra Joshi</b>  <b>INAUGURAL FUNCTION</b>	Introduction to Healthcare Operations Management  <b>Dr. Susmit Jain</b>	L U N C H B R E A K	Hospital as a System  <b>Brig. S.K. Puri</b>	Tools & Techniques in Healthcare Operations Management- Gantt Chart, Network & Time Analysis. Case Study/Exercises. <b>Dr. Susmit Jain</b>	
Wednesday 18.03.2015	Recap – Day 1  <b>Dr. Susmit Jain</b>	Organization and Management of Clinical Services <b>Brig. S.K. Puri</b>	Organization and Management of Support and Utility Services <b>Dr. V.P. Raghuvanshi</b>		Tools & Techniques in Healthcare Operations Management - CPM, PERT Probability Approach. Using Software for analysis. <b>GROUP WORK</b> <b>Dr. Susmit Jain</b>		
Thursday 19.03.2015	Recap – Day 2  <b>Dr. Susmit Jain</b>	Optimizing Results:- Through Team Working (MANAGEMENT GAME) <b>Dr. Tanjul Saxena</b>	Project Cost Analysis Case Study/ Exercises  <b>Dr. Susmit Jain</b>		Resource allocation through Linear Programming (LP) methodology <b>Dr. Susmit Jain</b>	Applications of LP in Assignments and Transportation problems. Case Study/Exercise Solutions using software. <b>Dr. Susmit Jain</b>	
Friday 20.03.2015	Recap – Day 3  [SJ]	Forecasting techniques and approaches in health care operations <b>Dr. Susmit Jain</b>	Control Charts, 7 QC tools in healthcare. Case Study Solutions using software.  <b>Dr. Susmit Jain</b>		Facility Location and Layout techniques in health care. <b>Dr. Susmit Jain</b>	Queuing & Capacity planning in healthcare services.  <b>Dr. Susmit Jain</b>	
Saturday 21.03.2015	Recap – Day 4  [SJ]	Healthcare Supply Chain Inventory Mgmt., EOQ, JIT, ABC/VEN analysis techniques <b>EXERCISES/CASE STUDY</b> <b>Dr. Susmit Jain</b>			Quality Management in Healthcare.  <b>Dr. Susmit Jain</b>	TQM and Six-Sigma in healthcare. <b>Dr. Susmit Jain</b>	<b>VALE DICTORY</b>
Tea Break 11:15-11:30;					Tea Break 15:15-15:30;		

## Feedback of the participants





### Participants attending the Sessions



**Healthcare Operations Management**  
**“Techniques & Applications”**  
**March 17-21, 2015**

**List of Participants**

S.No.	Name and Address of Participants
1.	<p><b>Dr. Rajshree</b> Sr. Executive Operations Healthcare Global Enterprises Ltd. No. 44-45/2, Raja Ram Mohan Roy Ext. Off Lalbagh Road, Bangalore-27, Karnataka Ph: 080-40206000/6521/6401 Mob: 09916896436 E-mail: <a href="mailto:drrajshree4u@gmail.com">drrajshree4u@gmail.com</a></p>
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4.	<p><b>Ms. Bilma Mathew</b> Officer- Quality Assurance Dr. Shroff Charity Eye Hospital, Delhi 5027, Kedarnath Road, Daryaganj, New Delhi -110002.</p>



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9.	<b>Mohd Shouib Hashimi</b> HMIS Consultant Ministry of Public Health

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10.	<p><b>Ms. Manjula Nirupama H.S.</b></p> <p>Manager – Operations</p> <p>Healthcare Global Enterprises</p> <p>No. 8, P. Kalinga Roa Road</p> <p>S.R. Nagar, Bangalore -560027,</p> <p>Ph: 080-40206000 Mob: 09945152679</p> <p>E-mail: nirupama.dgh@gmail.com</p>
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13.	<p><b>Ms. Shraddha Kashyap</b></p> <p>Regional Public Health Consultant</p> <p>Office of Joint Director Health Services</p> <p>Bastar Division (Jagdalpur), Chhattisgarh</p> <p>Mob: 07828488337</p> <p>E-mail: <a href="mailto:shradhakshp85@gmail.com">shradhakshp85@gmail.com</a></p>

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