

**Health Care Operations Management OTM 245 - 01**  
**Winter 2000 Syllabus**

**3/9/2000**

The Anderson School  
Operations and Technology Area – OTM 245 Lecture 1

January 10, 2000 – March 17, 2000  
Thursday 9-11:50 AM in Room B301

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**Course Description**

Changes in the environment of health care delivery have renewed the importance of operational aspects of management in health care organizations. Concerns about productivity and quality of service are two examples of operational decisions that play key roles in the formulation of competitive strategy.

This is a full quarter MBA course that introduces and reviews the field of operations management in the service industry, focusing on the delivery of health services. This course demonstrates the important relationship between operations research and the management of complex health care delivery organizations. It will focus on the formulation of competitive strategy in operations management decision areas, including strategic planning, process design, quality control, and staff allocation. This course will be of interest to future health care delivery system managers, operations consultants, and decision-makers in organizations that support health care delivery.

The objectives of this course are to:

1. Introduce operations management concept and methodologies which are employed in health care and other sectors, emphasizing their use in decision-making;
2. Prepare the health care interested MBA student to recognize and apply operations management principles to problems encountered in health care planning and management in the private and public sectors;
3. Focus on important health care operations issues, particularly quality control and service design.

The course is designed with a dual purpose in mind: it provides a broad self-contained coverage of operations management in health care management and as such should be relevant to all business students regardless of their intended major. The course is also treated to a series of courses in production and operations management; other particularly relevant courses are OTM 240A, 240B, 240C and 240D.

**Text and materials**

**Required readings and case studies**

James A. Fitzsimmons, Mona J. Fitzsimmons, Service Management: Operations, Strategy and Information Technology, 2<sup>nd</sup> Edition, Irwin/McGraw-Hill., 1998

Course reader containing case studies/readings for Management 245 will be available at the Anderson School.

**Course requirements**

Grades will be assigned on the following basis:

1. Project (55%)

Groups of one to four students will select a project about a current decision in which there are underlying health care operations management issues. Each group will hand in a short written report in the project by February 10, 2000 and will submit a final project report in the form of a case study by March 16, 2000. Students will be assigned a group grade for the project report and individual grade for their participation in project discussion.

2. Case analyses and write-ups (30%)

The cases eligible for written analysis are: *University Health Services: Walk-In Clinic*, *Sunrise Hospital*, *Partners Health Care System (B)* and *Ophthalmic Consultants of Boston*.

You will be assigned two of these cases to prepare a written analysis of the issues in each case (not more than 6 pages in length double spaced – quantitative exhibits may be extra but no more than 4 additional pages.) These written analyses are to be handed in prior to the case discussion on the assigned day for the case. All students are responsible to be prepared to discuss every case in class.

3. Class Participation (15%)

Class participation will be evaluated by subjective evaluation of the student's preparation, understanding of assigned readings, insight into operations issues, relevance, content, originality and clarity. On any day, students may be called upon to discuss course materials unless the student gives prior notice that day.

4. Homework

Homework problems illustrating quantitative decision modelling will be handed out from time to time. Many of these problems are for your own benefit and are not to be handed in.

Please try to sit in the same seat in each class and bring your name cards to facilitate learning your names.

**Session 1 (9:00-10:20)**

**January 13, 2000**

Topics:

Introduction and Overview

Services and The Health Care

Orientation to The Health Care Economic Environment Today System

***Required readings:***

James A. Fitzsimmons, Mona J. Fitzsimmons, Service Management: Operations, Strategy and Information Technology, 2<sup>nd</sup> Edition, Irwin/McGraw-Hill., Chapters 1 & 2, 1998.

Alemi F and J Agliato, Restricting Patients' Choices of Physicians: A Decision Analytic Evaluation of Costs. *Interfaces*. 19:2: 20-28. March-April, 1989.

Pierskalla, William, Health Care Economics: Today and Tomorrow. (Speech at the National Academy of Science) *Medical and Biological Engineering in the Future of Health Care*, pp. 43-52, 1994.

Simkin MG. He saved the Company \$10 Million – And Apologized! *Interfaces*. 19:3:61-64. May-June, 1989.

**Session 2 (10:30-11:50)**

**January 13, 2000**

Project Discussion 1

**Sessions 3 (9:00-10:20)**

**January 20, 2000**

Productivity, Performance and Process Analysis

***Required readings:***

Fetter RB. Diagnosis Related Groups: Understanding Hospital Performance. *Interfaces*. 21:1:6-26. January-February, 1991.

James A. Fitzsimmons, Mona J. Fitzsimmons, Service Management: Operations, Strategy and Information Technology, 2<sup>nd</sup> Edition, Irwin/McGraw-Hill., pp., 136-149 and pp., 288-293, 1998.

James, Brent C., What is Turp? Controlling Variation in the Performance of Clinical Processes, Ch. 7 Improving Clinical Processes, (David Blumenthal and Ann C., Scheck Editors) Jossey Bass Publishers, San Francisco 1995, pp 167-202.

***Optional reading:***

James A. Fitzsimmons, Mona J. Fitzsimmons, Service Management: Operations, Strategy and Information Technology, 2<sup>nd</sup> Edition, Irwin/McGraw-Hill., Chapter 14, pp 451-457, 1998.

Ozcan et al. "Trends in Labor Efficiency among American Hospital markets" *Annals of Operations Research*, pp. 61-81, 1996.

**Session 4 (10:30-11:50)**

**January 20, 2000**

Process analysis

***Required readings:***

James A. Fitzsimmons, Mona J. Fitzsimmons, Service Management: Operations, Strategy and Information Technology, 2<sup>nd</sup> Edition, Irwin/McGraw-Hill., pp., 136-149 and pp., 288-293, 1998.

\*Homework 10.2 p. 309 and 10.7 on p. 311

James, Brent C., What is Turp? Controlling Variation in the Performance of Clinical Processes, Ch. 7 Improving Clinical Processes, (David Blumenthal and Ann C., Scheck Editors) Jossey Bass Publishers, San Francisco 1995, pp 167-202.

**Sessions 5 & 6 (9:00-11:50)**

**January 27, 2000**

***Guest Speaker:***

Don Chenoweth, CEO of health2health.com

Information Needs, Uses and Systems in Health Care Delivery  
(readings were handed out in class)

**Sessions 7 & 8 (9:00-11:50)**

**February 3, 2000**

***Guest Speaker:***

Don Chenoweth, CEO of health2health.com

Information Needs, Uses and Systems in Health Care Delivery  
(readings will be handed out in advance)

**Sessions 9 & 10 (9:00-11:50)**

**February 10, 2000**

***Guest speaker:***

Michael Carter, PhD

Canadian Health Care System and Operations Management Applications  
(readings will be handed out in advance)

**Session 11 (9:00-10:20)**

**February 17, 2000**

Process Analysis

***Case Studies:***

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University Health Services: Walk-In Clinic. HBS 9-681-061

Quality, Productivity and Costs: data and methods

***Required readings:***

James A. Fitzsimmons, Mona J. Fitzsimmons, Service Management: Operations, Strategy and Information Technology, 2<sup>nd</sup> Edition, Irwin/McGraw-Hill., pp., 269-287, pp., 293-306 and pp., 319-329, 1998.

Donabedian A. The Quality of Care: How it Can Be Assessed? *Journal of the American Medical Association*. 260(12): 1743-8. 1988.

Ishikawa, K. *Guide to Quality Control*. White Plains, New York: Quality Resources. 1982. Chapters 1,2, and 3.

Gaucher, Ellen J. and Richard J. Coffee, Chapter 13-a Case Study of Quality Improvement, Total Quality in Health Care, Jossey-Bass Publishers, San Francisco, 1993, pp., 397-440.

**Session 12 (10:30-11:50)**

**February 17, 2000**

Quality, Productivity and Costs: Case Study

***Case Studies:***

Sunrise Hospital, Anderson Health Care Case #95-01.

**Session 13 (9:00-10:20)**

**February 24, 2000**

***Guest Speaker:***

Jay Smith DSc.

Resource Management Applications using Activity-based Methods and Real-time Tracking

**Session 14 (10:30-11:50)**

**February 24, 2000**

***Guest Speaker:***

Jay Smith DSc.

***Case Study:***

LARGE SCALE PRACTICE MANAGEMENT – A major healthcare provider implements an enterprise-wide resource control system.

**Session 15 (9:00-10:20)**

**March 2, 2000**

Operations management strategy

***Case study:***

Partners Health Care System Inc. (B), HBS 5-696-109

**Session 16 (10:30-11:50)**

**March 2, 2000**

Integration of Tactical and Strategic Operations Management

**Session 17 (9:00-10:00)**

**March 9, 2000**

**Case study:**

Ophthalmic Consultants of Boston and Dr. Bradford J. Shingleton, HBS 9-697-080

**Session 18 (10:15-11:50)**

**March 9, 2000**

Demand Forecasting

**Required readings:**

James A. Fitzsimmons, Mona J. Fitzsimmons, Service Management: Operations, Strategy and Information Technology, 2<sup>nd</sup> Edition, Irwin/McGraw-Hill., pp., 486-508, 1998

**Session 19 (9:00-10:00)**

**March 16, 2000**

Project presentations

**Session 20 (10:15-11:50)**

**March 16, 2000**

Clinical Decision Support and Physician Decision Making  
(readings will be handed out in advance)