

Supply Chain Management
Course Number: 22:799:696
Course Title: Healthcare Service Management

COURSE DESCRIPTION

This course introduces trends, strategies, techniques, and best practices to improve unit, organizational, and integrated delivery system performance by applying key concepts from operations and supply chain management to the healthcare context. The first half of the semester focuses on the value-based purchasing programs including cost/efficiency, patient outcomes, patient safety, patient experience, and clinical processes. The second half of the semester focuses on service components including vertical integration and professional services outsourcing, service process design, quality improvements, healthcare supply chain management, project management, and healthcare analytics. The objective is to effectively manage information, material and financial exchanges for healthcare provider organizations to improve the quality of services and efficiency. **This is a hybrid course featuring face-to-face as well as asynchronous online sessions.** The schedule specifies the delivery method for each week.

COURSE MATERIALS

- Optional Text: Christopher Moriates, Vineet Arora, Neel Shah. (2015). *Understanding Value Based Healthcare*. Lange. ISBN-13: 978-0071816984, ISBN-10: 0071816984.
*** You can find a e-copy of the book on Rutgers' library portal.
 - Harvard Business School and other cases will need to be purchased online. More information to follow.
 - Lecture slides and other materials will be provided on Canvas.
 - Check Canvas (canvas.rutgers.edu) and your official Rutgers email account regularly.
 - Additional reading materials will be shared on a weekly basis
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LEARNING GOALS AND OBJECTIVES

This course is designed to help students develop skills and knowledge in the following area(s):

1. **Business knowledge.** MSHSM graduates will have a command of business theory and practice.

Students will demonstrate:

- a. Understanding of the entire healthcare industry
- b. Mastery of fundamental business concepts and an ability to integrate and apply these concepts to resolve practical healthcare business problems.

2. Analytical capability. MSHSM graduates will use analytical skillsets when analyzing problems and making decisions.

Students will demonstrate:

- a. Proficiency at analyzing and interpreting numerical data to resolve practical healthcare business problems.

3. Persuasive communication. Students graduating with an MSHSM degree will be effective communicators.

Students will demonstrate:

- a. Ability to construct clear, concise, and convincing written healthcare business communication.
- b. Ability to construct and deliver clear, concise, and convincing oral healthcare business communication.

Students develop these skills and knowledge through the following course activities

Lectures. Lectures generally include theoretical knowledge (preparation in making the right decision) and practical examples and exercises (practice in developing and executing the decision) about specific healthcare services management concepts. PowerPoint slide decks will aid the professor's presentation of the material to transfer the knowledge to the learners/students. Lectures make use of practical examples from business and industry, and interactive group and individual exercises to help ensure thorough comprehension of the material.

Homework and In-Class Assignments. Homework and in-class exercises are assigned to reinforce concepts in the course and for learners/students to practice newly acquired skills. Homework is submitted, graded, and reviewed in class to ensure knowledge transfer. These assignments are completed in groups as well as on an individual basis.

Small Group Presentations. Students are assigned to a small group (generally 3 students per group). Groups must work together as a team on homework and in-class assignments as instructed by the professor. Students are asked to develop a presentation of the assignment for the class and deliver the presentation to the entire class. Presentations vary in length and students must be clear and concise in their communications.

Examinations. The course includes two examinations to formally assess learners' knowledge and comprehension. Exams are thought provoking and managerially oriented and generally use an essay format with calculations.

ACADEMIC INTEGRITY

I do NOT tolerate cheating. Students are responsible for understanding the RU Academic Integrity Policy (<http://academicintegrity.rutgers.edu/>)

I will strongly enforce this Policy and pursue *all* violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, “On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment.” I will screen all written assignments through *SafeAssign* or *Turnitin*, plagiarism detection services that compare the work against a large database of past work. Don’t let cheating destroy your hard-earned opportunity to learn. See business.rutgers.edu/ai for more details.

COURSE POLICIES

1. **The syllabus may be modified at the professor’s discretion to improve effectiveness and meet the needs of the class**
 2. You are expected to be present at **all** scheduled classes. The only exceptions follow those consistent with University policy. That said, please contact the Professor if you become aware of work-related conflicts. **There may not be make-up exams or assignments.**
 3. You are expected to come prepared to the class. At a minimum this means that you have read and completed any assigned material or problems.
 4. Please **silence your cell phone during class** and **refrain from text and IM messaging.**
 5. **No electronic devices will be permitted during examinations.** The only possible exception will be calculators or laptops if exams are administered on-line.
 6. **Recording Lectures:** All unauthorized recordings of class lectures/discussions are prohibited. Recordings to accommodate the needs of individual students must be approved in advance, for personal use during the semester only. Redistribution of approved recordings are prohibited.
 7. Assignment Due Dates: **All assignments (including exams) are due when specified, not later. All written assignments are to be typed and presented in a highly professional manner. The only exception may be exams requiring written responses conducted “in class.”**
 8. You are expected to check your Rutgers email and Canvas regularly for current course information. This will be the primary means of communication used for the course. *“When in doubt, check your Rutgers email and Canvas.”*
 9. I expect that you will find that I am very accessible and available to speak with you. I encourage you to contact me with any questions that you have about the course or your career. I truly am happy to help you and I welcome your calls, even via my cell phone! That said, please do not contact me via cell phone after () .
 10. All University policies will be followed in this course.
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EXAM DATES AND POLICIES

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|---|-----------------------------|
| Midterm exam | 20% (<i>Due date: ()</i>) |
| Final exam | 30% (<i>Due date: ()</i>) |
| Group Case Presentation / Analysis | 19% *** |
| <i>*** (3% summaries of each case & 10% your case presentation)</i> | |
| Group HOT Topics Presentation | 21% (<i>Due date: ()</i>) |
| Homework, assignments & participation | 10% |

Please note that the average grade for the class will be a B and the final grades for the class can be subject to curve: “A” for top 20%, “A-” next 20%, the lower 60% will be assigned letter grades of B+, B, B-, C+, etc.

ADDITIONAL INFORMATION ABOUT ASSIGNMENTS & GRADING POLICY

Midterm and Final Exams

The purpose of examinations is to provide students with an opportunity to synthesize, integrate, and report on the topics discussed, and materials provided in the course by responding to thought provoking, managerially oriented questions. Exams will be evaluated based on the thoroughness and thoughtfulness of the student’s responses as well as the student’s integration of the course material into his/her responses. Problems will be evaluated based on the correctness of each answer. Exams require the ability to critically analyze quantitative information and communicate clearly and effectively in a written fashion.

Group Case Presentation / Analysis

Learners will form groups of approximately five each. Each group will be assigned a case throughout the semester for analysis and presentation. Please plan on covering at least the following. It is OK to add additional information items as team see fit.

- Brief Synopsis of the Case
- Problem Statement (specific problems)
- Application of course concepts
- Analysis-Qualitative and Quantitative(as appropriate)
- Recommendations
- Lessons Learned
- Post Case-where are they today?(if possible)
- Please also respond to any case specific questions provided.

Length: Approximately 45 minutes, 15 minutes for Questions.

No Written Report Necessary, but copy of your PowerPoint must be submitted through Canvas and sent to me electronically by noon the day of the presentation and a hard copy given to me in class. Please annotate the slides in the notes section.

On “off weeks” when your group is not presenting the case, each group is expected to submit a twopage executive summary describing: 1) problem statement (specific problems), 2) application of course concepts, 3) analysis-qualitative and quantitative (as appropriate), 4) recommendations, and 5) any lessons learned.

Group HOT Topics Presentation

The purpose of this group project is to bring knowledge to our class about new, cutting-edge issues and approaches in healthcare services management. These presentations should be deep dives into a topic that has not been directly covered in our course but may have been tangentially discussed. HOT topics presentations may also be extensions of key topics discussed in class. Groups should prepare an annotated PowerPoint (PPT) file, containing thorough slide descriptions in the ‘notes section,’ that they will present to the class on (). The PPT slide decks are due in final form by noon on () via Canvas. The presentation should be about 20 minutes and cover: 1) background – what is the topic about, 2) why is it cutting-edge / what is cutting-edge about the topic, 3) what would you tell your CEO about the topic / what should s/he know about it, 4) how can this information help you in your career, and 5) where can your colleagues go to learn more about it.

Homework, assignments & participation

Homework assignments are graded in much the same fashion as examinations described above. However, grading of assignments is intended to be a bit more developmental than exams which are evaluative in nature.

Final grades

Final grades are determined in a simple additive, mathematical nature. In other words, I simply sum or tally the exam and assignment grades and provide the result as an accumulated final course grade. Your final grade is not subject to negotiation. Mistakes are possible –we are all human. If you feel that I have made an error, I will be happy to review a written argument, provided that it has been submitted to me within one week of receiving your final grade. Clarify the precise error I made and provide all due supporting documentation. If I have made an error, I will gladly correct it. However, I will adjust grades only if I have made an error.

Grading Scale:

Per the grading guideline from the department, the final grade for the class may subject to curve so that the average of class will be 3.5 or a B+. The final grades for the class can be subject to curve: “A” for top 20%, “A-” next 20%, the lower 60% will be assigned letter grades of B+, B, B-, C, etc. Unsatisfactory performance in class can lead to D or F. Please also note that grades may not be rounded up at the end of the semester.

COURSE SCHEDULE

The course schedule is provided in the following. Roughly, the first half of the course covers how unique factors present in the healthcare environment (e.g., regulations and reimbursement) influence operations, while the second half of the course covers key concepts from operations and supply chain management that are necessary to effectively lead healthcare provider organizations in response to the changing environment.

| Sessions | Topics covered | Assignments |
|--------------------|---|--|
| #1 Online | <u>Syllabus and course introduction</u> Course policy, overview of key issues in health care, health care as a service | 1. Report: 2018 Global health care outlook The evolution of smart health care (Deloitte, 2018) 2. Report: Top health industry issue of 2018 (Pwc) 3. Report: Healthcare services sector update 2018 (Duff & Phelps) 4. Form teams for presentation |
| #2 Face-to-Face | From volume-based to <u>valuebased care</u> Value-based purchasing program | 1. Chapters 1&4 /Textbook 2. Article: Hospital value-based purchasing – (MLN Booklet, 2017) 3. Presentation: Medicare Value Based Purchasing -201 – (MHA, 2017) (Optional) 4. Report: Value-based pricing in pharmaceuticals – (KPMG, 2016) |
| #3 Online | <u>Cost/Efficiency</u> Efficiency, inefficiency, and waste | 1. Chapter 10 / Textbook 2. Article: The effect of experience, ownership, and focus on productive efficiency – (Ding, 2014) 3. Article: Measuring efficiency - The association of hospital cost and quality of care – (Jha 2009) 4. Article: Is U.S. medical care inefficient? – (Fuches 2018) |
| #4 Face-to-Face | <u>Patient experience</u> Measurements of patient experience, relationship between experience and outcomes | 1. Chapter 12/ Textbook 2. Article: The patient experience and health outcomes – (Manary et al., 2013) Also accompanying interview audio (~21 minutes) 3. Article: Collecting patient experience ... used to improve care (Coulter et al., 2013) 4. HBR case team presentation: Cleveland clinic: Improving the patient experience. |
| #5 Online | <u>Patient safety</u> Safety culture, organizational factors | 1. Report: To error in human (IOM 1999) 2. Paper: The influence of organizational factors on patient safety (Richter 2014) 3. Paper: Examination of the relationship between management and clinician perception of patient safety ... (Mazurenko 2019) Listening to the accompanying podcast interview with MD James L. Reninsersen |

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| #6 Face-to-Face | <u>Clinical outcomes</u> Quality outcomes, process measures | <ol style="list-style-type: none"> 1. Report: The top seven healthcare outcome measures and three measurement essentials – (HealthCatalyst 2017) 2. Report: How to define health care outcomes – (BCG, 2015) 3. Article: Why process quality measures may be more valuable than outcome measures in critical care patients- (Kyeremanteng, 2015) 4. HBR case team presentation: Performance management at Intermountain healthcare |
| #7 Online | <u>Mid-term exam</u> | Covering all topics in sessions #1-#6 |
| Due by () | | |
| #8 Online | <u>Health Information Technology</u> Health IT, EMR | <ol style="list-style-type: none"> 1. HBR paper: A note on healthcare IT and applications to the healthcare industry 2. Paper: Information technology and social sciences – (WagnerMenghin, 2016) 3. Paper: Health IT adoption, productivity, and quality in primary care – (Brunt, 2014) |
| No Classes | | |
| #9 Face-to-Face | <u>Vertical integration/service outsourcing</u> | <ol style="list-style-type: none"> 1. Report: Six physician alignment strategies health systems can consider – (Deloitte, 2015) 2. Paper: The physician employment trend: What you need to know – (Singleton, 2015) 3. HBR case team presentation: Newton-Wellesley Hospital |
| #10 Online | <u>Project management</u> Scope, WBS, CPM, PERT, Probability of completion, risk, EVM | <ol style="list-style-type: none"> 1. Project management overview 2. Lynda minicourse- Overview of health project challenges 3. Optional Lynda mincourse pack – Become a healthcare project manager 4. (Both Lynda courses are available through my Apps upon login of my.rutgers.edu, provided by LinkedIn) |
| #11 Face-to-Face | <u>Analytics in healthcare management</u> | <ol style="list-style-type: none"> 1. Article: Applications of business analytics in healthcare – (Ward et al. 2014) 2. Article: Understanding healthcare analytic competencies – (Thotwave) 3. Article: Understanding job families and roles 4. HBR case team presentation: Carolinas healthcare systems – Consumer analytics |
| #12 Online | <u>Population health</u> | TBD |

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| #13 Face-to-Face | <u>Industry speakers</u> | TBD |
| #14 Face-to-Face | Group HOT Topics presentations/ merge with Healthcare Analytics Class | TBD |
| #15 Online Due by | <u>Final exam</u> | |

SUPPORT SERVICES

If you need accommodation for a *disability*, obtain a Letter of Accommodation from the Office of Disability Services. The Office of Disability Services at Rutgers, The State University of New Jersey, provides student-centered and student-inclusive programming in compliance with the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments of 2008, Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act of 1998, and the New Jersey Law Against Discrimination. More information can be found at ods.rutgers.edu.

[Rutgers University-New Brunswick ODS phone (848)445-6800 or email dsoffice@echo.rutgers.edu]

[Rutgers University-Newark ODS phone (973)353-5375 or email ods@newark.rutgers.edu]

If you are *pregnant*, the Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy.

[Rutgers University-New Brunswick Title IX Coordinator phone (848)932-8200 or email jackie.moran@rutgers.edu]

[Rutgers University-Newark Office of Title IX and ADA Compliance phone (973)353-1906 or email TitleIX@newark.rutgers.edu]

If you seek *religious accommodations*, the Office of the Dean of Students is available to verify absences for religious observance, as needed.

[Rutgers University-New Brunswick Dean of Students phone (848)932-2300 or email deanofstudents@echo.rutgers.edu]

[Rutgers University-Newark Dean of Students phone (973)353-5063 or email DeanofStudents@newark.rutgers.edu]

If you have experienced any form of *gender or sex-based discrimination or harassment*, including sexual assault, sexual harassment, relationship violence, or stalking, the Office for Violence Prevention and Victim Assistance provides help and support. More information can be found at <http://vpva.rutgers.edu/>.

[Rutgers University-New Brunswick incident report link: <http://studentconduct.rutgers.edu/concern/>. You may contact the Office for Violence Prevention and Victim Assistance at (848)932-1181]

[Rutgers University-Newark incident report link: https://cm.maxient.com/reportingform.php?RutgersUniv&layout_id=7 . You may also contact the Office of Title IX and ADA Compliance at (973)353-1906 or email at TitleIX@newark.rutgers.edu. If you wish to speak with a staff member who is confidential and does **not** have a reporting responsibility, you may contact the Office for Violence Prevention and Victim Assistance at (973)353-1918 or email run.vpva@rutgers.edu]

If students who have experienced a temporary condition or injury that is adversely affecting their ability to fully participate, you should submit a request via <https://temporaryconditions.rutgers.edu>.

If you are a military *veteran* or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. <http://veterans.rutgers.edu/>

If you are in need of *mental health* services, please use our readily available services.

[Rutgers University-Newark Counseling Center: <http://counseling.newark.rutgers.edu/>]

[Rutgers Counseling and Psychological Services–New Brunswick: <http://rhscaps.rutgers.edu/>]

If you are in need of *physical health* services, please use our readily available services.

[Rutgers Health Services – Newark: <http://health.newark.rutgers.edu/>]

[Rutgers Health Services – New Brunswick: <http://health.rutgers.edu/>]

If you are in need of *legal* services, please use our readily available services: <http://rusls.rutgers.edu/>

Students experiencing difficulty in courses due to *English as a second language (ESL)* should contact the Program in American Language Studies for supports.

[Rutgers–Newark: PALS@newark.rutgers.edu]

[Rutgers–New Brunswick: eslpals@english.rutgers.edu]

If you are in need of additional *academic assistance*, please use our readily available services.

[Rutgers University-Newark Learning Center: <http://www.ncas.rutgers.edu/rlc>

[Rutgers University-Newark Writing Center: <http://www.ncas.rutgers.edu/writingcenter>]

[Rutgers University-New Brunswick Learning Center: <https://rlc.rutgers.edu/>]

[Optional items that many faculty include:

- Students must sign, date, and return a statement declaring that they understand the RU Academic Integrity Policy.

- Students must sign, date, and return a statement declaring that they understand this syllabus.]