



NORTHWESTERN
UNIVERSITY

SCHOOL OF
CONTINUING
STUDIES

MED_INF 404: Healthcare Enterprise Operations

Fall 2011

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Office Hours: By appointment only

Course Description

This course examines the core operations of the acute care setting (in hospital) incorporating principles of operations management and identifying the unique information technology needs required for hospital operations. Scope includes patient access services, ambulatory care, clinical practice, nursing services, personnel and staffing, and finance.

Text

White, K. R., & Griffith, J. R. (2010). *The well-managed healthcare organization (7th ed.)*. Chicago, IL: Health Administration Press.

[ISBN: 978-1567933574]

In addition to the textbook above, this course requires students to purchase and read two articles from the Harvard Business Review Web site (HBR Online) at <http://hbr.org>. The price of each article is \$6.95. See the required readings in the Session 5 and Session 7 folders in the Blackboard course site for citations for both required HBR articles.

To purchase a case study:

- Locate the document using the search functionality on the Web site
- Click the "Purchase Article" link
- Select the version (English PDF or English Hardcopy Black & White) and quantity
- Click "Add to Cart" to place the item in your shopping cart
- Complete the purchase using the "Check Out" button on your shopping cart screen

Software

None.

Prerequisites

None.

Learning Goals

The goals of this course are to:

- Analyze operating areas of a hospital.
- Improve operating areas of a hospital.
- Create a performance monitoring tool effective for operating areas of hospital and the board of directors.
- Analyze informatics initiatives, requirements, and funding associated with HITECH (meaningful use).
- Translate clinical needs to IT decision support.
- Predict the technology application attributes that will be effective within hospital operating areas.
- Construct a hospital budget.
- Construct a proposal to obtain funding for a major IT initiative.

Evaluation

The student's final grade will be determined as follows:

- Group Formation (Session 2): 0 points
- Board Presentation Topic Proposal (Session 3): 0 points
- Intermountain Healthcare Case Study Write-Up (Session 3): 16 points

- D&T utilization assignment (Session 4): 16 points
- Children's Hospital Case Study Write-Up (Session 5): 16 points
- Midterm Exam (Session 6): 100 points
- Care Group Case Study Write-Up (Session 7): 16 points
- Operating Room Staffing Assignment (Session 8): 16 points
- Corporate Budget Assignment (Session 8): 16 points
- Board Presentations (Session 9): 54 points
- Final Exam (Session 10): 100 points

Total Points: 350 pts.

Grading Scale

94%–100% = A

90%–93% = A-

86%–89% = B+

83%–85% = B

80%–82% = B-

76%–79% = C+

73%–75% = C

70%–72% = C-

0%–69% = F

Discussion Board Etiquette

The purpose of the discussion boards is to allow students to freely exchange ideas. It is imperative to remain respectful of all viewpoints and positions and, when necessary, agree to respectfully disagree. While active and frequent participation is encouraged, cluttering a discussion board with inappropriate, irrelevant, or insignificant material will not earn additional points and may result in receiving less than full credit. Frequency is not unimportant, but content of the message is paramount. Please remember to cite all sources—when relevant—in order to avoid plagiarism.

Proctored Assessment

None.

Attendance

This course will not meet at a particular time each week. All course goals, session learning objectives, and assessments are supported through classroom elements that can be accessed at any time. To measure class participation (or attendance), your participation in threaded discussion boards is required, graded, and paramount to your success in this class. Please note that any scheduled synchronous or “live” meetings are considered supplemental and optional. While your attendance is highly encouraged, it is not required and you will not be graded on your attendance or participation.

Late Work

Work submitted late will have 10 points deducted for each day it is late. Assignments will not be accepted after two days and the student will receive zero points for the assignment.

Learning Groups

Learning groups are utilized in this course. More information about learning groups will be provided by the instructors via the Blackboard course site.

Academic Integrity at Northwestern

Students are required to comply with University regulations regarding academic integrity. If you are in doubt about what constitutes academic dishonesty, speak with your instructor or graduate coordinator before the assignment is due and/or examine the University Web site. Academic dishonesty includes, but is not limited to, cheating on an exam, obtaining an unfair advantage, and plagiarism (e.g., using material from readings without citing or copying another student's paper). Failure to maintain academic integrity will result in a grade sanction, possibly as severe as failing and being required to retake the course, and could lead to a suspension or expulsion from the program. Further penalties may apply. For more information, visit www.scs.northwestern.edu/student/issues/academic_integrity.cfm.

Plagiarism is one form of academic dishonesty. Students can familiarize themselves with the definition and examples of plagiarism, by visiting <www.northwestern.edu/uacc/plagiar.html>. A myriad of other sources can be found online.

Some assignments in this course may be required to be submitted through SafeAssign, a plagiarism detection and education tool. You can find an explanation of the tool at <<http://wiki.safeassign.com/display/SAFE/How+Does+SafeAssign+Work>>. In brief, SafeAssign compares the submitted assignment to millions of documents in large databases. It then generates a report showing the extent to which text within a paper is similar to pre-existing sources. The user can see how or whether the flagged text is appropriately cited. SafeAssign also returns a percentage score, indicating the percentage of the submitted paper that is similar or identical to pre-existing sources. High scores are not necessarily bad, nor do they necessarily indicate plagiarism, since the score does not take into account how or whether material is cited. If a paper consisted of one long quote that was cited appropriately, it would score 100%. This would not be plagiarism, due to the appropriate citation. However, submitting one long quote would probably be a poor paper. Low scores are not necessarily good, nor do they necessarily indicate a lack of plagiarism. If a 50-page paper contained all original material, except for one short quote that was not cited, it might score around 1%. But, not citing a quotation is still plagiarism.

SafeAssign includes an option in which the student can submit a paper and see the resultant report before submitting a final copy to the instructor. This ideally will help students better understand and avoid plagiarism.

Other Processes and Policies

Please refer to your SCS student handbook at <www.scs.northwestern.edu/grad/information/handbook.cfm> for additional course and program processes and policies.

Course Schedule

Important Note: Changes may occur to the syllabus at the instructor's discretion. When changes are made, students will be notified via an announcement in Blackboard.

Session 1

Learning Objectives

After this session, the student will be able to:

- Interpret the mechanisms available for hospital boards of directors to carry out their key roles.
- Explain the attributes of an effective system level performance dashboard.
- Explain the status of the care provided in the US healthcare system from the perspective of quality, safety, and value.
- Distinguish the attributes of improvement methods that have proven successful within the hospital setting.

Course Content

Textbook Reading

White, Chapters 1 – 4, 14

Online Reading

To Err is Human: Building a Safer Health System

Multimedia

Developing a dashboard

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

None.

Sync Session

None.

Session 2

Learning Objectives

After this session, the student will be able to:

- Explain core tenants for improving the US healthcare system.
- Explain key operating principles of inpatient care operations.
- Assess inpatient care operations to optimize performance.
- Design informatics and operational practices to improve patient outcomes and operations in pharmacy and laboratory operations.
- Develop a performance dashboard for an inpatient unit.

Course Content

Textbook Reading

White, Chapters 5 – 7

Online Reading

Crossing the Quality Chasm: A New Health System for the 21st Century
Patient Safety and the “Just Culture”: A Primer for Health Care Executives

Multimedia

Understanding inpatient care operations

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students’ comments is graded. For this session’s discussion topic(s), visit the discussion board in Blackboard.

Assignments

Group Formation is due Sunday, October 2, 2011 at 11:55 p.m. (central time). For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment’s item.

Sync Session

Monday, September 26, 2011 (7–9:30 p.m. central time)

Session 3

Learning Objectives

After this session, the student will be able to:

- Develop hospital strategy that incorporates the HITECH Act (meaningful use).
- Design IT decision support within the electronic health record that effectively meets clinical needs.

Course Content

Online Reading

Intermountain Health Care HBS Case 9-603-66

HIT Policy Committee: Meaningful use workgroup request for comments regarding meaningful use Stage 2 Regulations & Guidance

Multimedia

Understanding of the different types of decisions supports, their strengths and weaknesses, and their design principles

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Board Presentation Topic Proposal and Intermountain Healthcare Case Study Write-Up are due Sunday, October 9, 2011 at 11:55 p.m. (central time). For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session

None.

Session 4

Learning Objectives

After this session, the student will be able to:

- Explain key operating principles of diagnostic testing and treatment operations.
- Assess diagnostic testing and treatment operations to optimize performance.
- Calculate diagnostic testing and treatment area utilization.
- Design informatics and operational practices to improve patient outcomes and operations in diagnostic testing and treatment operations.
- Develop a performance dashboard for a diagnostic testing and treatment operations.

Course Content

Textbook Reading

White, Chapter 8

Multimedia

Understanding D&T operations

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

D&T Utilization Assignment is due Sunday, October 16, 2011 at 11:55 p.m. (central time). For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session

None.

Session 5

Learning Objectives

After this session, the student will be able to:

- Explain key operating principles of pharmacy and laboratory operations.
- Assess pharmacy and laboratory operations to optimize performance.
- Design informatics and best practices to improve patient outcomes and operations in pharmacy and laboratory operations.
- Assess the implications of barcode scanning in the medication administration process.
- Develop a performance dashboard for pharmacy and laboratory operations.

Course Content

Online Reading

Harvard Business Review, Children's Hospital and Clinics HBS Case 9-302-050

Multimedia

Understanding Pharmacy & Laboratory operations

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Children's Hospital Case Study Write-Up is due Sunday, October 23, 2011 at 11:55 p.m. (central time). For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session

None.

Session 6

Learning Objectives

After this session, the student will be able to:

- Explain key operating principles of operating rooms and labor and delivery operations.
- Assess the operating rooms and labor and delivery operations to optimize performance.
- Design informatics and best practices to improve patient outcomes and operations in the operating rooms and labor and delivery operations.
- Develop a performance dashboard for the operating rooms and labor and delivery operations.

Course Content

Online Reading

Tomorrow's Operating Room to Harness Net, RFID
Beyond the Count: Preventing Retention of Foreign Objects

Multimedia

Time-out Video
Understanding operating room & L&D operations

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Midterm Exam is due Sunday, October 30, 2011 at 11:55 p.m. (central time). For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session

None.

Session 7

Learning Objectives

After this session, the student will be able to:

- Explain key operating principles of the emergency department and hospital flow operations.
- Assess the emergency department and hospital flow operations to optimize performance.
- Design informatics and best practices to improve patient outcomes and operations within the emergency department and hospital flow operations.
- Develop a performance dashboard for the emergency department and hospital flow operations.

Course Content

Online Reading

Harvard Business Review, Care Group Case 9-303-097

Multimedia

Understanding D&T operations

Understanding the inputs, outputs, and key levers of hospital flow

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Care Group Case Study Write-Up is due Sunday, November 6, 2011 at 11:55 p.m. (central time). For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session

None.

Session 8

Learning Objectives

After this session, the student will be able to:

- Develop a staffing budget for an operational department.
- Explain the components of a hospital budget.
- Calculate charity care for a hospital.
- Explain key operating principles of care coordination operations, which include scheduling, registration, pre-authorization, eligibility, pathways, and referrals.
- Assess care coordination operations to optimize performance.
- Design informatics and best practices to improve patient outcomes and performance within care coordination operations.
- Develop a performance dashboard for care coordination operations.

Course Content

Textbook Reading

White, Chapter 13

Online Reading

AORN Guidance Statement Preoperative Staffing

Multimedia

Understanding care coordination operations

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Operating Room Staffing Assignment and Corporate Budget Assignment are due Sunday, November 13, 2011 at 11:55 p.m. (central time). For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session

None.

Session 9

Learning Objectives

After this session, the student will be able to:

- Design a funding proposal for a major IT initiative.
- Gain board approval for an initiative that improves hospital quality, patient safety, or care coordination that leverages technology.

Course Content

Textbook Reading

White, Chapter 14

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Board Presentations are due Sunday, November 20, 2011 at 11:55 p.m. (central time). For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session

None.

Session 10

Learning Objectives

After this session, the student will be able to:

- No new learning objectives will be introduced in this Session.

Course Content

None.

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Final Exam is due Sunday, December 4, 2011 at 11:55 p.m. (central time). For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session

None.