

SAN DIEGO STATE UNIVERSITY
Graduate School of Public Health

PH 647b Health Quality and Information Management

Day: Wed Time: 1:00 – 3:40 PM
Location: CC 215, With off campus field visits as indicated

<u>Instructor:</u> Michael Peddecord, Dr.P.H. Professor <u>Office Hours:</u> Usually Tuesday 1:30-3:00 PM Prefer appointments <u>Office Location:</u> HT 109 619-594-4779 mpeddeco@mail.sdsu.edu	<u>Additional Instructors:</u> Paul Kurtin, MD, Adjunct Professor, Director of the Maternal and Child Initiative, GSPH, SDSU & Senior VP for Innovation and Performance, Children’s Hospital and Health Center. Guest Speakers as indicated
--	---

Prerequisite: Completion of PH 647 A or permission of the instructor.

DESCRIPTION OF THE COURSE

Health quality measurement and improvement, focusing on managed care computer applications. Topics include outcomes and performance measurement; health and patient databases; type of databases and their management; hardware, software, and networks; systems analysis and design; and project control methods.

All health information management (HIM) subjects and assignments will focus a variety of HIM topics. The emphasis in HIM is on "systems" and "management." This is not a course in computers *per se*, even though computers are an indispensable tool in HIM. You will build skills in dealing with health information systems that are practical and business oriented. However, you will neither be expected to perform complex quantitative analyses, learn programming languages, nor master any particular software package. You must be prepared to translate data into meaningful management information and to upgrade your skills and confidence in doing so.

Please be advised that this is not a course about computes or the Internet, although you may find yourself using both. If you need training in basic software applications or Internet utilization, there are a variety of elective courses and training sessions available throughout SDSU. Students have different levels of expertise in HIM and computer technology. It is expected that a few students will have considerable in-depth expertise in some information technologies; others have fewer skills. It is not the intention of the course to bring everyone up to the same level of technical expertise.

COURSE OBJECTIVES

This course will help you accomplish the following learning objectives, many of which are specified in the Division’s statement of mission and goals (numbers 2.xx.xx as indicated):

1. Appreciate that patient/customer based performance information is essential for effective strategic and operational management. 2.10.1
2. Understand and apply concepts and methods for measuring and improving organizational performance, including total quality management (TQM), continuous quality improvement (CQI) and six sigma techniques. 2.10.2
3. Understand the activities of important agencies/organizations involved in regulating, report card development, consumer advocacy and quality assurance in healthcare organizations. 2.10.3
4. Be able to analyze and evaluate the issues of quality and safety from competing ethical imperatives, profit motives, professional values and perspectives of multiple customers such as patients, payers and healthcare professional. 2.10.5 (partial coverage in this course)
5. Understand the production and interpretation of a comprehensive set of organizational performance indicators, including process indicators, patient-based and clinical outcomes, and related financial, cost-effectiveness, and cost-utility indicators. 2.10.6 (partial coverage in this course)
6. Understand and analyze the importance of satisfaction and other patient outcomes measures; and possess the ability to manage the collection, reporting and use of this information. 2.10.7
7. Be able to engage in primary data collection using experimental and quasi-experimental design techniques for controlled health delivery/clinical research. Have a basic understanding of survey research construction and design, including use of scaling techniques. 2.4.5 (partial coverage in this course)
8. Understand alternative approaches to planning, acquisition and implementation of HIM systems and software.
9. Describe alternative organizational approaches for management of HI systems.
10. Describe current trends in public health informatics, the role of HIM in quality and safety improvement, trends in Regional Health Information Organizations (RHIOs).
11. Understanding the central role of internal and external networks in current HIM systems. Understand and apply basic concepts in the management of health information systems. Be confident in dealing with health information systems, HIM personnel, software and hardware trends, and various other people involved in information generation at all levels of the organization. Each student will know the vocabulary, what it means, and how to overcome jargon "to get your point across."
12. Know how to approach large sets of health-related data (public and private) in order to transform it into meaningful management information. Each student will be able to communicate this knowledge to HIM personnel and health

PH 647b Health Quality and Information Management Fall 2006

professionals. Students will be able to distinguish between "computer glitz" and a useful information system with relevant output.

13. Apply and improve his/her software skills in the pursuit of learning CQI techniques, HIM concepts and presentation techniques.
14. Understand and be able to use standard coding procedures and conventions for documentation and analysis of health delivery encounters (e.g., ICD-9 codes, CPT-4 codes, DRGs, RBRVs, etc.). 2.4.4 (partial coverage in this course)
15. Be able to employ complex textual and numeric relational databases for management decision making and control, internal research, and ease of data retrieval (e.g., using Access, Paradox, etc.). 2.4.3 (partial coverage in this course)
16. Understand techniques for measuring health status, behavioral health risks and service needs in defined populations and communities. 2.10.4 (partial coverage in this course)

BLACKBOARD AND E-MAIL & COMPUTER RESOURCES

Announcements, course documents, weekly reading and Power Point handouts, etc., will be posted on Blackboard. All students must check the Blackboard regularly. All students must have reliable internet access and e-mail. Students must be able to access a modern PC setup with a modem and communications package.

EXPECTATIONS Students are expected to:

- Attend every class and field site visit. Arrange your schedule now to insure that you will be present at all sessions. Absences will significantly affect your grade in the course. More than 2 unexcused absences will lower your grade by one letter.
- Read/study the assigned readings, websites, and other materials prior to class sessions: .
- Be on time for all class sessions. For guest lectures and field trips, dress professionally.
- Students will also benefit greatly from the optional texts, websites, and other posted resources.
- During the sessions you are expected to actively participate in the discussions. You are expected to arrive at each class session with a carefully thought-out set of ideas, observations and questions related to the week's topic based on: assigned readings in the texts; materials posted on the course's web site; explorations of internet-based resources (an initial set of links are provided on the course's web site); and your own experiences.
- Log-on to the Blackboard site at least several times each week and: monitor announcements; complete assignments and read materials posted in the documents section; and participate in the course's e-seminar (in the communications section).
-

GRADING

Your grade in this course will be determined as follows:

- mid-term exam 15%
- Final exam 20%
- Group Assignments, 30-35 %
- Other assignments. presentations and papers 30%
- class attendance, promptness and the quality of your participation Priceless ~ 5 %

More detail on assignments will be provided in class, and on Blackboard. Assignments and point allocation subject to change based on class needs and the whim of the instructor.

COURSE RESOURCES AND TEXTS

Required: Readings posted on BB. Possible Reading Packet: Cal Copy - more information in class.

Karen A. Wager, Frances Wickham Lee, John P. Glaser *Managing Health Care Information Systems: A Practical Approach for Health Care Executives*. Jossey-Bass Publishing, 2005. (**Wager**)

Lighter, D.E., Fair, D.C. *Quality Management in Health Care: Principles and Methods*. 2nd Ed. 2004. Paperback. Jones and Bartlett. Sudbury, Mass. (**Lighter**)

Optional: National Academy Press, Institute of Medicine *Crossing the Quality Chasm: A New Health System for the 21st Century (CQC)* (available on line see BB links for URL)

ASSIGNMENTS (Due dates and specifics are subject to change)

(Approx. % value)	Brief summary only: See BB Assignment folders for more specifics and updated due dates. Some assignments have intermediate products and or due dates.	Tentative Due Dates
Personal Health Record (PHR) systems analysis comparison (15%)	Brief group report on selected software and/or internet vendors offering web or PC software products designed for individuals and/or providers to store medical record information in an accessible / exchangeable format. More detail and supporting materials provided. To avoid duplication, vendor(s) must be approved by instructor. See Wager Activity 5-1 and Appendix A for some framework. See assignment folder on BB for PP slides for list of issues, vendors etc. The final written report will be a “consumer report” for a health care organization.	Groups by Week 3. Written report due week 14 Class reports week 15
Ambulatory Care Process CQI Report (15%)	Quality improvement groups are assigned the task of analyses of a common ambulatory care process. An SPSS data set with audit result for ~ 140 cases is provided. Product: Memo with findings and recommendations plus a brief oral presentations with PP summary slides	Groups designated by week 3 Memos due Week 10 Class Reports Week 11
Q.I. 6 Sigma or Group Tool Report (15 %)	Pick a CQI/Six Sigma “tool”. A list will be provided. Study the tool, prepare examples. Develop a 10 minute mini-class to summarize the used and provide examples for the class. Sign up for presentation time beginning week 3. Turn-in your teaching materials on the BB assignment icon (e.g. a 1 -2 page summary and or PP slides) .	Begin reports Week 4
2 Focused Learning Activities #1, #2 Each 5%	At the end of each chapter in Wager text are suggestions for learning activities. Possible choices are (Chapter and - #): 1-2; 2-1; 3-6; 4-3, 4-1; 5-3; 6-1, 6-4; 7-1; 8-2, 8-4; 10-2, 10-3; 13-1; 14-1. Another option is to read and provide a brief review of a book or published journal article related to quality policy, quality improvement, safety, 6 Sigma, or health information, health or public health informatics. NO Pre-approval required if you choose from the above. If your activity is something unusual, check with instructor. Selected public meeting related to the class topic are also applicable. Watch BB for announcements. Turn-in: Brief written report (~1 page but not more that 2 pages). Be sure to provide complete references if appropriate.	Due Weeks 9 & 13
Quality Report Card Review (5%)	Brief report on a quality report card. Most are web based, and provide ratings or HEDIS results for health plans or medical groups. Some rate hospitals. Focus on local (California) providers or local subsets from a national data base such as Medicare. Turn-in: Brief written report. See BB for specific contents.	Due week 7

See Blackboard weekly or bi-weekly folders for reading assignments, handouts and other materials.

Week	Date	Topics	Presenter / Facilitator	Key Readings see BB folders
1	August 30	Course Introduction, Group assignments Practice analysis, personal medical record (PHR) system, History and Philosophy, Quality Assurance	Peddecord	Lighter Ch. 1, Handouts (BB) CQC Ex Sum,
2	September 6	Health information & Data Quality, Medical Coding	Peddecord	Wager 1, 2,3 Appendix A
3	September 13	TQM/CQI, Process Improvement, Six Sigma , Safety & regulation, TQM Six Sigma Methods	Peddecord	Lighter Ch. 2, 3 (BB) Opt. Lighter Ch. 4-6
4	September 20	Evidence based Quality Improvement, External Accreditation issues, Safety Initiatives, _Organizational Transformation-Current Issues & future trends Mini-Classes for QI 6 Sigma & Group tools Begin	Dr. P. Kurtin	Seid et al (BB) Lighter Ch. 8, 9
5	September 27	Surveys for satisfaction & performance measurement: development, planning, analysis,	Peddecord	Peddecord et al (BB) Lighter Ch 10-11
6	October 4	Risk management, disease management, related topics. Satisfaction surveys: statistical analysis	Peddecord	Lighter Ch. 12 Ex Sum To Err is Human (BB)
7	October 11	Quality & Group Tool reports continue Criteria for PHR systems analysis	Peddecord	Report Card Reports due
8	October 18	Mid-term exam Public Health Informatics. Dr. Rob Seidman.	Peddecord	Wager 4, 8
9	October 25	Prospects and Realities of Electronic Medical Records: a case study of physician order entry system implementation. Guest: Dr. Willa Fields, SoN, SDSU, Sharp Health Care.		Wager 5, 9,
10	November 1	Management of a Public Health Information System: San Diego IZ Registry. Ms. Ann Cordon, Manager and SDIR Team Oceanside Room Rosecrans Bldg	Field Trip H. Svcs. Complex Rosecrans St.	Wager 6, 7 Learning Act. #1 due.
11	November 8	Organization and Strategic Management of HI Systems and the Architecture in Healthcare Settings. Mr. Bill Spooner, Senior VP and Chief Info. Officer, Sharp Healthcare	Field Trip Sharp Operations Center	Wager 10
12	November 15	Mini-Classes Ambulatory Care Process QI Reports Telecommunications, Networks, Confidentiality and Security		Wager 11, 12, 13, 14
13	November 22	Mini-Classes Planning, development, achieving value in HIS systems		Wager 15, Appendix B Learning Activity #2 Due
14	November 29	Regional Health Info Organizations (RHIOs) & realities of EMRs in medical practice. Stephen H. Carson M.D. Chief Med Officer, SDCMS Foundation	SD MINE demo	PHR Reports Due
		Management of Change in the Dynamic HC Information Environment: Guest		
15	Dec. 6	Reports on PHR systems		
16	December 13	Second midterm	TBD	

Update August 30