

**Healthcare Quality Improvement and Informatics  
Fall 2007**

<b>Instructors:</b>	Patricia Parkerton, MPH PhD	Robert Kaplan PhD	Jean Balgrosky MPH
<b>Office:</b>	41-259D CHS	31-293C CHS	special reader (TA)
<b>Phone:</b>	(310) 825-2926	(310) 825-7652	
<b>E-mail:</b>	<a href="mailto:parkert@ucla.edu">parkert@ucla.edu</a>	<a href="mailto:rmkaplan@ucla.edu">rmkaplan@ucla.edu</a>	<a href="mailto:jbalgrosky@ucla.edu">jbalgrosky@ucla.edu</a>

**Class Time:** 1:00 – 3:50 PM, Monday  
**Class Room:** 41-268 CHS  
**Office Hours:** after class or please e-mail for appointment

### **Introduction**

The techniques for improving health care workplace processes, such as performance measurement, rapid cycle testing, and collaboratives, have benefited the productivity and quality of many organizations. Quality improvement techniques have been applied to health care after adaptation from other industries. Application of these techniques to assess the structures, processes, and outcomes of medical services complement advancements in management practices and information technology.

Increasing competitive pressures, demands for better data on quality of care, and continued advances in computer hardware and networks will accelerate the application of broader process redesigns and comprehensive information systems in coming years. Combining advances in information technology with a process view can create organizations with higher quality, decreased error, and higher value.

### **Course Objectives**

The objectives of the course include:

#### Quality Improvement

- To provide the student with a basic understanding of the principles of quality measurement, improvement, and operations process as applied in practice.
- To provide theories for understanding the organizational context within which new management practices are applied.

#### Informatics

- To convey fundamental technical knowledge, conceptual frameworks, and terminology for the student to become an informed user and manager of information systems.
- To penetrate informatics and information systems interface with organizations and can be used to improve organizational performance

## Textbook and Readings

The required texts for the class are:

CP McLaughlin and AD Kaluzny, *Continuous Quality Improvement in Health Care*, 3<sup>rd</sup> Edition, Sudbury, MA; Jones and Bartlett Publishers, 2005.

KA Wager, FW Lee, and JP Glasser, *Managing Health Care Information Systems: a Practical Approach for Health Care Executives*, San Francisco: Jossey-Bass, 2005.

Supplemental handouts or downloads sites will be distributed

Materials should be read before class so that students can participate fully in the discussions.

## Course Methodology

Conceptual frameworks, context, and applications will be presented by the instructors through lectures, discussion, visiting speakers, and computer demonstrations supplemented by readings. Analyses of cases will allow the students to apply this knowledge to real organizational examples. Theory and content will be expressed in class, cases, and examinations. Dr. Parkerton will teach Quality Improvement and Dr. Kaplan Informatics.

**Prerequisites:** Summer internship or equivalent work experience

## Grading

Grades will be based on class participation and performance on the following assignments:

1. Verbal discussion and written outlines of cases (format will be distributed)
2. Quality improvement examination--take home, short answer
3. Quality/ Informatics Initiative report and PPT slides (7 teams)
4. Informatics EMR report and presentation (5 teams)

Points may be accrued as follows:

<u>Activity</u>		<u>Written</u>	<u>Discussion/Presentation</u>	
1. Case Rex	QI	5	5	individual/class
2. Case DIMSA	QI	5	5	individual/class
3. Exam. Short answer	QI	20		individual take-home
4. Initiative	QI/Informatics	5	15	team presentation
5. EMR Report	Informatics	20	10/10	team presentation/report
Total	100	<u>60</u>	<u>40</u>	

Class	Date	Instructor	Topics	Reading/Assignments
1 QI	O 1	Parkerton Kaplan	Introductions, syllabus review Why QI needed QI Concepts, Elements	<i>Berwick Video: Escape Fire discussion</i>
2 QI	O 8	Parkerton	QI Techniques Teams Customer focus	<i>MK, Chap. 1, 2</i> <i>Brainstorm, team fishbone</i> <b>4. Form Initiative team</b>
3 QI	O 15	Parkerton	Data driven analysis, 7 tools Staff engagement Implementation	<i>MK, Chap. 3, 5</i> QI Case: Rex from MK <b>1. Case submit/ discuss</b>
4 QI	O 22	Parkerton	Quality measurement Health care data: sources, quality, QI case: Business Case-Group Chg	<i>MK Chap. 4, 10, 11</i> <b>2. Case submit/discuss</b> on-line at cmwf.org
5 QI	O 29	Parkerton Rosenthal Kaplan	Evolution, TCAB QI in Academic Health Center Informatics overview and summary	<b>3. Distribute QI exam</b> <i>WLG Chap. 1, 2</i>
6 In	N 5	Kaplan Balgrosky	Info systems concepts & issues, Networks & the Internet, Software, IS development & management	<i>WLG Chap 4, 8</i> <b>3. Submit QI exam</b> <b>5. Form 5 EMR teams</b>
	N 12	Holiday	No class	
7 In	N 19	Kaplan Fu	LA County system EHRs, NHII, CPOE Standards	<b>WLG Chap 5, 9</b>
8 In	N 26	Student Teams	Quality/Informatics Initiatives 10-15 minute team ppt. presentations	<b>4. Present Initiatives</b>
9 In QI	D 3	Kaplan Bell	Electronic prescribing Privacy & Security HIPAA	<i>WLG Chap 6, 7, 11</i>
10 In	D10? Final s	Kaplan	Overview, wrap up Team presentations	<b>5. Submit/Present EMR report</b>

\* [http://www.cmwf.org/publications/publications\\_show.htm?doc\\_id=221331](http://www.cmwf.org/publications/publications_show.htm?doc_id=221331)