# Quality and operations management

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***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

*General Learning Objectives*:

To be able to design, operate, and evaluate health care quality management systems and operations.

*Knowledge Outcomes:*

– Understand why quality management is needed.

– Understand impact of clinical decision making on quality of care.

– Understand impact of administrative systems on quality of care.

– Understand the impact of ancillary processes on the performance of healthcare organizations.

– Understand approaches to measuring quality.

– Understand approaches that have been taken in quality management.

– Understand strengths and weaknesses of different approaches.

– Understand the design and management of health care operations.

– Understand how to design and control a supply chain management system.

– Understand how to create value with healthcare operations management.

* Understand the current trends and innovation in the organization of healthcare productions processes

*Skills Outcomes:*

– Ability to apply basic tools of quality improvement such as flowcharting, fishbone diagrams, statistical process control, etc. in health care settings.

– Ability to evaluate reliability and validity of criteria, guidelines, protocols, and other decision making tools.

– Ability to apply information systems for quality measurement and improvement.

– Ability to identify and prioritize opportunities for improvement.

– Ability to determine appropriate methods of improving performance and considerations in implementing such methods.

– Ability to measure the performance of hospital patient flows logistics.

– Ability to design a supply chain management system.

– Ability to implement changes in the organization of healthcare delivery processes.

***COURSE CONTENT***

Health care organizations are required to provide quality health care as a competitive necessity as well as a regulatory requirement and ethical imperative. The course aims firstly to give students a theoretical framework regarding the definition and measurement of quality in healthcare.

Secondly, students will be introduced to the traditional quality improvement techniques such as regulation, credentialing, education, and to new techniques, including continuous quality improvement, system design, practice guidelines, clinical pathways and performance reports.

The course will focus particularly on operations management issues. The use of operations management techniques, extensively applied in businesses of all kinds, has also become a necessity in health care. In order for managers to improve the quality and efficiency of health care delivery, or successfully launch new services or products, they must understand the design and management of health care operations.

***READING LIST***

Green and paper-less course: slides, cases studies and readings are all available on black-board.

***TEACHING METHOD***

Classes consist of both lectures and discussions. Case studies will be used to introduce students to a wide range of practical operational issues in healthcare delivery.

The course is aimed primarily at those students interested in managing health care delivery processes. It will be equally valuable for students interested in careers devoted to the definition of health policies in the public and private sectors.

Finally, a good understanding of operations and supply chain management systems is becoming increasingly important for suppliers (e.g. pharmaceutical and medical devices companies) that aim to develop beneficial and lasting relationships with healthcare organizations.

***ASSESSMENT METHOD AND CRITERIA***

For attending students, the final grade will be computed as it follows:

Individual assignment (15%)

Group work (15%)

Class Participation (10%)

Mid-term exam (30%)

Final exam (30%)

For non attending students the evaluation will be based on a single written exam on the whole program.

***NOTES AND PREREQUISITES***

In your own interest and of your colleagues, please try to observe the following courtesy rules:

1. Arrive in class on time; do not leave early.

2. Keep your mobiles and laptops off; do not use wireless network emailing in class.

3. Minimize wandering in and out of the classroom.

4. Participate fully in class.

5. Pull your weight in group/joint work. Do not free-ride on your colleagues!

6. Hand in assignments on time. Late submissions are not accepted.

Partecipation to all classes is highly recommended.

*In case the current Covid-19 health emergency does not allow frontal teaching, remote teaching will be carried out following procedures that will be promptly notified to students.*