

WM085-15 Operational Management and Clinical Systems Improvement

27/28

Department

WMG

Level

Taught Postgraduate Level

Module leader

Sudakshina Lahiri

Credit value

15

Module duration

4 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

This module goes beyond current approaches that are used to address challenges involving health system performance and management. It will familiarize students with systematic approaches in the analysis and design of health service systems for effective operational management leading to clinical systems improvement. Module materials will focus on areas such as managing patient flow, capacity, and resource utilization. Materials will also examine tool and techniques that are applied to monitor quality and service design including clinical guidelines quality benchmarks, thresholds and outcomes. Students will have the opportunity to review a range of quality improvement initiatives and techniques that have been used across various health systems in order to improve patient safety, efficiency, equity, effectiveness and person-centered care.

Module aims

The module aims to provide students with fundamental knowledge and analysis skills, quantitative and qualitative, that are required for addressing unnecessary variation involving a given healthcare system. Through a combination of lectures and lab sessions, this module will help to examine factors that contribute to variability in the quality of care and how system performance can be

improved by reducing such variability.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

1. Operational and managerial systems in health service delivery
2. Developing informed clinical systems improvement initiatives
3. Reducing variability in health service
4. Use of data and information for to design improvement projects
5. Analysis and assessment of targets and outcomes and their role in clinical systems improvement
6. Use and applications of statistical tools with health care data to design improvement projects

Learning outcomes

By the end of the module, students should be able to:

- Critically examine and distinguish factors that drive the need for clinical systems improvement
- Demonstrate in-depth understanding of the type of improvement needed along with underlying principles, and concepts necessary when developing a service improvement initiative
- Integrate various theories/framework, methods and tools in order to design and implement a quality improvement project.
- Critique designs for quality improvement initiatives through application of the rules of evidence to the published literature.
- Systematically analyze data and interpret results for clinical system improvement

Indicative reading list

[Reading lists can be found in Talis](#)

[Specific reading list for the module](#)

Research element

This module incorporates elements of quantitative and qualitative data along with critique of extant evidence and applying these for healthcare quality improvement.

Interdisciplinary

Healthcare operational management is a new emerging discipline that combines health science methodologies with engineering, statistics, quantitative elements of management with data science for quality and productivity improvement in the healthcare sector. This modules focusses on drawing techniques from these disciplines to help address unnecessary variation for clinical

systems improvement.

Subject specific skills

- data and information literacy
- mathematical and statistical skills
- application of best practices around healthcare quality improvement

Transferable skills

- problem solving
 - critical thinking
 - ethical values
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Study

Study time

Type	Required
Lectures	15 sessions of 1 hour (10%)
Seminars	(0%)
Tutorials	15 sessions of 1 hour (10%)
Practical classes	(0%)
Online learning (independent)	5 sessions of 1 hour (3%)
Other activity	20 hours (13%)
Private study	35 hours (23%)
Assessment	60 hours (40%)
Total	150 hours

Private study description

Further reading on topics related to healthcare quality and productivity improvement.

Other activity description

Self-directed activities for preparation towards class work. Guidance for these activities will be provided to students in class.

Costs

No further costs have been identified for this module.

Assessment

You must pass all assessment components to pass the module.

Assessment group A3

	Weighting	Study time	Eligible for self-certification
Assessment component			
Written assignment-1	60%	36 hours	Yes (extension)
Map and analyze a given care scenario using process engineering approach.			

Reassessment component

Written assignment-1	No
Map and analyze a given care scenario using process engineering approach.	

Assessment component

Written assignmment-2	40%	24 hours	Yes (extension)
Conduct statistical analysis with a set of data and present the results, their interpretation and draw conclusions.			

Reassessment component

Written assignmment-2	No
Conduct statistical analysis with a set of data and present the results, their interpretation and draw conclusions.	

Feedback on assessment

Written feedback.

Availability

Courses

This module is Core optional for:

- Year 1 of TWMS-H1S5 Postgraduate Healthcare Operational Management (Full-time)