

Q101: Clinical Practice Improvement.

Course Content

I	The Epistemological Development of Quality in Medicine.
	a) History of Ideas in Medicine.
	b) Critical Analysis of EBM: Evidence Based Medicine VS Practice Based Evidence.
	c) Is Medicine a Science or Practice: The Nature of Scientific Practice.
	d) Epistemology of Improvement.
	i) History of Healthcare Quality and Evaluation.
	ii) History of Industrial Quality.
	iii) Quality Assurance [QA] vs Quality Improvement [QI].
	iV) Research vs Improvement.
	V) Improvement Science vs Implementation Science.
II	Statistical Development of Quality in Medicine.
	a) The Concepts of Epidemiology: Rate, Ratio and Indicators.
	b) The Epidemiology of Quality and Safety.
	c) The Definition and Dimensions of Quality of Healthcare.
	d) The History of Statistics in Medical Research.
	e) Statistical Decision Making about Cases.
	f) Statistical Decision making about Processes.
III	Methods and Tools of Improvement Science.
	a) Basic Tools of Quality.
	b) Basic Tools of Patient Safety.
	c) Advanced Tools for Quality Planning
	d) Six Sigma, Lean Management and TOC.

	e) The Model for Improvement.
IV	The Systemic Basis of Improvement Science.
	a) Design Thinking and Systems Thinking in Healthcare.
	i) Analysis vs Synthesis
	ii) Systemic imagination: Change Concepts.
	b) Systemic View of Outcomes.
	i) Maximization vs optimization.
	ii) Process dependency vs resource dependency.
	c) Organizing for Quality: Systems to Support Change.
	i) Public Health: Triple Aim and Chain of Effects.
	ii) Organization Infrastructure for Measurement, Analytics and Improvement.
	iii) The Locus of Clinical Improvement: Microsystems, Case and Context.
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