

## Learning Topics for QI Core Team at AIIMS

### **1. Overview - Science of Improvement – 5<sup>th</sup> Oct 2016**

- i. A brief history of quality improvement
- ii. W. Edward Deming's system of profound knowledge
- iii. Joseph Juran – Quality Trilogy
- iv. Walter Shewhart – Statistical process control & Prediction Theory

### **2. Understanding Organizations - 19<sup>th</sup> Oct 2016**

- i. Gain an appreciation of a System (Systems Thinking)
- ii. Understand basic concepts of Complexity Science
- iii. Understand the importance of systems thinking to improvement

### **3. Spreading new ideas – 2<sup>nd</sup> Nov 2016**

- i. What is 'spread'?
- ii. Everett Rogers Theory of Diffusion
- iii. Factors that determine spread
- iv. Other Theories for Spread of Ideas
- v. Designing from the start for spread

### **4. Developing Institution-wide Improvement Capability – 16<sup>th</sup> Nov 2016**

- i. Discussing elements of success for institutional improvement efforts
- ii. Overview of ways of developing improvement capability across the system

### **5. Data for Improvement – Understanding Variation & Run Charts – 30<sup>th</sup> Nov 2016**

- i. Understanding variation - Types of variation
- ii. Analytical Tools - Run charts
- iii. Understanding the underlying probability concepts of run chart interpretation rules
- iv. Introduction to using Excel Tools - QIMacro

### **6. Data for Improvement – Control Charts – 14<sup>th</sup> Dec 2016**

(to be done in continuity with “Understanding of variation and run charts”)

- i. Concepts of Statistical Process Control
- ii. Analytical Tools - Control charts

### **7. Human Factors & Safety – 28<sup>th</sup> Dec 2016**

- i. Understand the meaning of 'human factors'
- ii. Examples of human factors application in healthcare
- iii. Importance of human factors to quality of care

### **8. Creative thinking and Innovation – 11<sup>th</sup> Jan 2017**

- i. Understanding creativity and innovation
- ii. Approaches for coming up with innovative ideas to solve problems
- iii. Change concepts

### **9. Implementing Changes and Sustaining Improvements – 25<sup>th</sup> Jan 2017**

- i. What is meant by testing vs. Implementing
- ii. Understanding various ways of implementing a change
- iii. Guidance on how to make a successful change an integral part of the system

### **10. Frameworks for improving systems and terminology – 8<sup>th</sup> Feb 2017**

- i. An overview of the Model for Improvement
- ii. Familiarity with other frameworks and terminology such as Lean, Six-sigma, Kaizen, FMEA, TQM, Reliability etc.