**Overview of Performance Improvement Methods and Tools**

Performance Improvement Methods - These are different approaches that are used for designing quality improvement projects. They generally follow basic problem-solving steps. The ones covered are:

* Plan, Do, Check Act (PDCA
* Plan, Do, Study, Act (PDSA)
* AIM – PDSA
* Rapid Cycle Improvement
* Six Sigma – Define, Measure, Analyze, Improve, Control (DMAIC)
* Lean – Lean Six Sigma

Performance Improvement Tools - These are techniques used during planning and execution of projects to facilitate team interaction, process analysis, process redesign and process management. Examples are:

* Prioritization Matrix/Matrix Diagram
* Cause and Effect Diagram
* Flow Chart
* Brainstorming
* Nominal Group Technique
* Multi-Voting
* Checklist
* Deployment Chart
* Activity Network Diagram
* Spaghetti Diagram
* Stratification Chart
* Affinity Diagram
* Tree Diagram
* Inter-relationship Diagram
* Process Design Program Chart
* Value Stream Mapping
* SIPOC
* 6S
* Action Plan

Data Analysis Tools - These are used to display and interpret data. Common statistical analysis tools are:

* Bar Graph
* Line Graph
* Run chart
* Control Chart
* Histogram
* Pareto Chart
* Pie Chart
* Scatter Diagram

PI Tools and statistical analysis tools are used with the various PI Methods

CPHQ exam candidates should have a working knowledge of the PI methods, PI tools, and statistical analysis tools and their application. Questions on these could be at the recall, application or analysis level