

## Change Concepts Handout

| Category                    | Method or Tool          | Typical Use of Method or Tool                                                      | Q1<br>Aim &<br>Assessment | Q2<br>Measures<br>O/P/B | Q3<br>Understanding<br>& Change Ideas | PDSA |
|-----------------------------|-------------------------|------------------------------------------------------------------------------------|---------------------------|-------------------------|---------------------------------------|------|
| Viewing Systems & Processes | Block Diagram           | Simplest picture of process/system.                                                | ★                         | ★                       | ★                                     |      |
|                             | Flow Diagram            | Develop a picture of a process. Communicate and standardize processes.             | ★                         | ★                       | ★                                     |      |
|                             | SIPOC                   | Develop a picture of a system/process components.                                  | ★                         | ★                       | ★                                     |      |
| Gathering Information       | Data Collection Methods | Plan and organize a data collection forms & effort. Recording data to ID patterns. | ★                         | ★                       | ★                                     | ★    |
|                             | Surveys                 | Obtain information from people.                                                    | ★                         | ★                       | ★                                     | ★    |
|                             | Benchmarking            | Obtain information on approaches from other organizations (beware of copying).     | ★                         | ★                       | ★                                     |      |

|                               |                          |                                                                                   |   |   |   |  |
|-------------------------------|--------------------------|-----------------------------------------------------------------------------------|---|---|---|--|
|                               | Creativity Methods       | Develop new ideas and fresh thinking. (Includes Brainstorming and NGT).           |   |   | ★ |  |
|                               | Affinity Diagram         | Organize and summarize qualitative information.                                   | ★ |   | ★ |  |
| <b>Organizing Information</b> | Force Field Analysis     | Summarize forces supporting and hindering change.                                 | ★ |   | ★ |  |
|                               | Cause and Effect Diagram | Collect and organize knowledge about potential causes of problems or variation    | ★ | ★ | ★ |  |
|                               | 5 Why                    | Used to uncover understanding of reasons behind intractable problems.             | ★ |   | ★ |  |
|                               | Matrix Diagram           | Arrange information to understand relationships and make decisions.               | ★ |   | ★ |  |
|                               | Tree Diagram             | Visualize the structure of a problem, plan, or any other opportunity of interest. | ★ | ★ | ★ |  |
|                               | Radar Chart              | Evaluate Alternatives or compare against targets with 3 or more variables.        |   |   | ★ |  |

|                                    |                         |                                                                                     |   |   |   |   |
|------------------------------------|-------------------------|-------------------------------------------------------------------------------------|---|---|---|---|
|                                    | FMEA                    | Used by process designers to identify and address potential failures.               |   |   | ★ |   |
| <b>Understanding Variation</b>     | Run Chart               | Study variation in data over time; understand the impact of changes on measures.    | ★ | ★ | ★ | ★ |
|                                    | Control Chart           | Distinguish between special and common causes of variation to understand correct.   | ★ | ★ | ★ | ★ |
|                                    | Pareto Chart            | Focus on areas of improvement with greatest impact in stable process.               | ★ |   | ★ | ★ |
|                                    | Frequency Plot          | Understand location, spread, shape, and patterns of data. Also called Histogram     |   | ★ | ★ | ★ |
| <b>Understanding Relationships</b> | Scatter Plot            | Analyze the associations or relationship between two variables.                     | ★ | ★ | ★ |   |
|                                    | Two-Way Table           | Understand cause/effect relationships for two categorical variables in planned exp. |   | ★ | ★ |   |
|                                    | Planned Experimentation | Design studies to evaluate relationships and test changes.                          |   | ★ | ★ |   |

|                             |                       |                                                                                           |   |   |   |   |
|-----------------------------|-----------------------|-------------------------------------------------------------------------------------------|---|---|---|---|
| <b>Team Decision Making</b> | Brainstorming         | Used to generate a large number of alternative ideas.                                     | ★ | ★ | ★ |   |
|                             | Nominal Group         | Generate large number of ideas, gives silent time to list ideas, often uses sticky notes. | ★ | ★ | ★ |   |
|                             | Multi-Vote            | Reduce large list of ideas to a list of 10 or less.                                       | ★ | ★ | ★ |   |
|                             | Rank Order            | Use to reduce a list of 10 or less, to the vital few ideas for further discussion.        | ★ | ★ | ★ |   |
|                             | Structured Discussion | Used to discuss the vital few ideas to arrive at a consensus decision.                    | ★ | ★ | ★ | ★ |
| <b>Planning</b>             | PDSA Forms            | Used to plan, organize and keep track of testing, implementation and spread cycles.       |   |   |   | ★ |
|                             | Team Member Matrix    | Identify range of talent, knowledge and skill needed for improvement team.                | ★ |   |   |   |
|                             | Communications Plan   | Identify key stakeholders and communications needs for each.                              | ★ | ★ | ★ | ★ |

|  |                   |                                         |   |   |   |   |
|--|-------------------|-----------------------------------------|---|---|---|---|
|  | Seven Step Agenda | Use to plan and run effective meetings. | ★ | ★ | ★ | ★ |
|--|-------------------|-----------------------------------------|---|---|---|---|

*Adapted from The Improvement Guide, pages 411-413. for the IHI Improvement Coach Professional Development Program, April 2016*