

 Healthcentric Advisors
 Quality Innovation Network -Quality Inprovement Organizations CENTERS FOR MEDICARE & MEDICAID SERVICES IGUALITY IMPROVEMENT & INNOVATION GROUP

## **PDSA Steps and Tools**

	Step	Purpose	Procedures	Tools	Outcomes
Plan	<ol> <li>Identify a product or service for improvement</li> </ol>	Identify a product (e.g., documentation, product, discharge instructions) or service/ care process/workflow for improvement.	<ul> <li>Identify team</li> <li>Describe service or product for improvement</li> </ul>	<ul> <li>Brainstorming/ Nominal Group Technique</li> <li>Multi-voting</li> <li>Statistical tools</li> </ul>	<ul> <li>Name of product or service</li> <li>Team established</li> <li>Begin story or huddle board</li> </ul>
	2. Identify your customers and their expectations	Understand customer requirements and what is needed to meet or exceed them.	<ul> <li>Identify customers and their expectations</li> <li>Collect data on how well needs are currently being met (baseline)</li> </ul>	<ul><li>Flowchart</li><li>Checksheet</li></ul>	<ul><li>List of customers</li><li>List of customer expectations</li><li>Add to story or huddle board</li></ul>
	3. Describe current work process	Understand the current process to produce the product or service.	Create flowchart of current process	Flowchart	<ul><li>Flowchart of current process</li><li>Add to story or huddle board</li></ul>
	<ol> <li>Identify improvement opportunities</li> </ol>	Select the focus of improvement (beginning and end points).	<ul> <li>Identify existing process complexity</li> <li>Use existing data to understand scope of complexity</li> <li>Prioritize improvement opportunities</li> <li>Select opportunity of greatest concern</li> </ul>	<ul> <li>Flowchart</li> <li>Process map</li> <li>Multi-voting</li> <li>Checksheet</li> <li>Statistical tools</li> </ul>	<ul> <li>Prioritized list of improvement opportunities</li> <li>Agreement on which opportunity to pursue</li> <li>Add to story or huddle board</li> </ul>
	5. Establish and verify cause and effect	Ensure identification of the "root cause" before the process is changed.	<ul> <li>Analyze "root cause" of selected opportunity</li> <li>Gather data to ensure proper opportunity has been identified</li> </ul>	<ul> <li>5 Why's</li> <li>Brainstorming</li> <li>Fishbone Diagram</li> <li>Data</li> <li>Scatter Diagram</li> </ul>	• The "causes" to be tackled first
	6. Revise the work process	Develop a plan to improve and monitor the process.	<ul> <li>Develop plan to streamline, shorten, simplify, or otherwise improve process</li> </ul>	<ul> <li>Brainstorming</li> <li>Multi-voting</li> <li>Flowchart</li> <li>Process Map</li> </ul>	<ul> <li>Flowchart of revised process</li> <li>Add to story or huddle board</li> </ul>

<sup>1</sup>Statistical tools include Pareto Chart, Scatter Diagram, Run and Control Charts and Histograms

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8	7. Conduct a small test of the revised process	Test the process change on a small scale before implementing throughout the systems.	<ul> <li>Design a small scale (e.g., one day, one shift, one patient) test of change</li> <li>Run revised process according to test plan</li> <li>Collect data on new process</li> </ul>	<ul> <li>Flowchart</li> <li>Checksheet</li> <li>Run Chart</li> <li>Scatter diagram</li> </ul>	<ul> <li>Data on impact of process revision</li> <li>Add to story or huddle board</li> </ul>
Study	8. Evaluate the results	Determine whether the revised process delivers product/service that meets customer requirements. Look for unintended results of the change. If more changes needed, go back to Step 5.	<ul> <li>Confirm effects of process change, check if root cause has been mitigated, any unintended consequences?</li> <li>Compare the problem before and after using the same indicators</li> <li>Go to back to PLAN if results are not satisfactory</li> </ul>	<ul> <li>Stratify with Statistical tools</li> </ul>	<ul> <li>Analyze results of test of change</li> <li>Recommendation(s) on how to proceed</li> <li>Add to story or huddle board</li> </ul>
	<ol> <li>Standardize and implement the improved process</li> </ol>	Implement the improved process widely.	<ul> <li>Conduct training on new process</li> <li>Communicate improvement procedure and results</li> <li>Gather data and continuously monitor process to maintain improvement</li> <li>Implement sustainability procedures to maintain gains</li> </ul>	<ul> <li>Flowchart</li> <li>Checksheet</li> <li>Pareto Chart</li> <li>Fishbone Diagram</li> </ul>	<ul> <li>Documentation of procedure and results</li> <li>Add to story or huddle board</li> </ul>
ACT	<ol> <li>Measure and analyze customer satisfaction</li> </ol>	Establish ongoing feedback about improved product or service with customers.	<ul> <li>Develop mechanism to seek information on customer recommendations</li> </ul>	<ul> <li>Brainstorming</li> <li>Flowchart</li> <li>Process Map</li> <li>Pareto Chart</li> <li>Fishbone Diagram</li> </ul>	<ul> <li>Process for collecting customer data</li> <li>Add to story or huddle board</li> </ul>
	<ol> <li>Share and celebrate your story!</li> </ol>	Encourage identification of and initiation of future improvements.	<ul> <li>Record team information</li> <li>Communicate quality story at all levels</li> <li>Recognize contributors</li> <li>Plan future improvements</li> </ul>	<ul> <li>Story or Huddle board</li> </ul>	<ul> <li>Share with others</li> <li>Plan for continuous improvement</li> <li>Celebration</li> </ul>

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