# PDSA Steps and Tools

<table>
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<tr>
<th>Step</th>
<th>Purpose</th>
<th>Procedures</th>
<th>Tools</th>
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</table>
| 1. | Identify a product or service for improvement | Identify a product (e.g., documentation, product, discharge instructions) or service/care process/workflow for improvement. | - Identify team  
- Describe service or product for improvement | Brainstorming/Nominal Group Technique  
Multi-voting  
Statistical tools | Name of product or service  
Team established  
Begin story or huddle board |
| 2. | Identify your customers and their expectations | Understand customer requirements and what is needed to meet or exceed them. | - Identify customers and their expectations  
- Collect data on how well needs are currently being met (baseline) | Flowchart  
Checksheet | List of customers  
List of customer expectations  
Add to story or huddle board |
| 3. | Describe current work process | Understand the current process to produce the product or service. | Create flowchart of current process | Flowchart | Flowchart of current process  
Add to story or huddle board |
| 4. | Identify improvement opportunities | Select the focus of improvement (beginning and end points). | - Identify existing process complexity  
- Use existing data to understand scope of complexity  
- Prioritize improvement opportunities  
- Select opportunity of greatest concern | Flowchart  
Process map  
Multi-voting  
Checksheet  
Statistical tools | Prioritized list of improvement opportunities  
Agreement on which opportunity to pursue  
Add to story or huddle board |
| 5. | Establish and verify cause and effect | Ensure identification of the “root cause” before the process is changed. | - Analyze “root cause” of selected opportunity  
- Gather data to ensure proper opportunity has been identified | 5 Why’s  
Brainstorming  
Fishbone Diagram  
Data  
Scatter Diagram | The “causes” to be tackled first |
| 6. | Revise the work process | Develop a plan to improve and monitor the process. | Develop plan to streamline, shorten, simplify, or otherwise improve process | Brainstorming  
Multi-voting  
Flowchart  
Process Map | Flowchart of revised process  
Add to story or huddle board |

1Statistical tools include Pareto Chart, Scatter Diagram, Run and Control Charts and Histograms
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| 7. Do         | Conduct a small test of the revised process                            | Test the process change on a small scale before implementing throughout the systems. | • Design a small scale (e.g., one day, one shift, one patient) test of change  
• Run revised process according to test plan  
• Collect data on new process | • Flowchart  
• Checksheet  
• Run Chart  
• Scatter diagram | • Data on impact of process revision  
• Add to story or huddle board |
| 8. Study      | 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. | • Confirm effects of process change, check if root cause has been mitigated, any unintended consequences?  
• Compare the problem before and after using the same indicators  
• Go to back to PLAN if results are not satisfactory | • Stratify with Statistical tools | • Analyze results of test of change  
• Recommendation(s) on how to proceed  
• Add to story or huddle board |
| 9. ACT        | Standardize and implement the improved process                          | Implement the improved process widely.                                      | • Conduct training on new process  
• Communicate improvement procedure and results  
• Gather data and continuously monitor process to maintain improvement  
• Implement sustainability procedures to maintain gains | • Flowchart  
• Checksheet  
• Pareto Chart  
• Fishbone Diagram | • Documentation of procedure and results  
• Add to story or huddle board |
| 10. ACT       | Measure and analyze customer satisfaction                               | Establish ongoing feedback about improved product or service with customers. | • Develop mechanism to seek information on customer recommendations  
• Brainstorming  
• Flowchart  
• Process Map  
• Pareto Chart  
• Fishbone Diagram | • Process for collecting customer data  
• Add to story or huddle board |
| 11. ACT       | Share and celebrate your story!                                         | Encourage identification of and initiation of future improvements.          | • Record team information  
• Communicate quality story at all levels  
• Recognize contributors  
• Plan future improvements | • Story or Huddle board  
• Share with others  
• Plan for continuous improvement  
• Celebration |

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