Directions: Use this Plan-Do-Study-Act (PDSA) tool to plan and document your progress with tests of change conducted as part of chartered performance improvement projects (PIPs). While the charter will have clearly established the goals, scope, timing, milestones, and team roles and responsibilities for a project, the PIP team asked to carry out the project will need to determine how to complete the work. This tool should be completed by the project leader/manager/coordinator with review and input by the project team. Answer the first two questions below for your PIP. Then, as you plan to test changes to meet your aim, answer question 3 below and plan, conduct and document your PDSA cycles. Remember that a PIP usually involves multiple PDSA cycles to achieve your aim. Use as many forms as you need to track your PDSA cycles.

Model for Improvement: Three Questions for Improvement

1. What are we trying to accomplish (aim)?
   State your aim (review your PIP charter and include your bold aim that will improve resident health outcomes and quality of care).
   
   **EXAMPLE:** 100% of short-stay residents will have appropriate documentation of assessment, education and offering of the influenza vaccine resulting in improved accuracy of the STR immunization quality measure.

2. How will we know that change is an improvement (measures)?
   Describe the measurable outcome(s) you want to see.
   
   **EXAMPLE:** EHR documentation will reflect that 100% of short-stay residents are assessed, educated on and offered the influenza vaccination.

3. What change can we make that will result in an improvement?
   **EXAMPLE:** Influenza vaccine documentation in EHR

Define the processes currently in place; use process mapping or flowcharting. Identify opportunities for improvement that exist (look for causes of problems that have occurred—see Guidance for Performing Root Cause Analysis with Performance Improvement Projects, or identify potential problems before they occur—see Guidance for Performing Failure Mode Effects Analysis with Performance Improvement Projects) (See root cause analysis tool):

- Points where breakdowns occur.
  **EXAMPLE:** Inconsistent/multiple locations or lack of documentation in EHR (i.e., hard copy paper in medical records)

- “Work-a-rounds” that were developed.
  **EXAMPLE:** Some staff send an email to the MDS nurse to add to the documentation.

- Variation that occurs.
  **EXAMPLE:** The content of documentation varies among nurses.

- Duplicate or unnecessary steps.
  **EXAMPLE:** Some staff is documenting in progress notes, some are sending an email to the MDS nurse and some document in a progress note and also send an email to the MDS nurse.

4. Decide what you will change in the process; determine your intervention based on your analysis.
   - Identify better ways to do things that address the root causes of the problem.
   - Learn what has worked at other organizations (copy).
   - Review the best available evidence for what works (literature, studies, experts, guidelines).
   - Remember that the solution doesn’t have to be perfect the first time.

   **EXAMPLE:**
   1. Create an EHR vaccination tab.
   2. Create a patient flu vaccination template for flu that captures MDS and regulatory components.
   3. Eliminate the email process to the MDS nurse.
### Plan

What change are you testing with the PDSA cycle(s)?
What do you predict will happen and why?
Who will be involved in this PDSA? (e.g., one staff member or resident, one shift?). Whenever feasible, it will be helpful to involve direct care staff.
Plan a small test of change.
How long will the change take to implement?
What resources will they need? What data need to be collected?

**EXAMPLE:** Team includes informatics specialist (IT), infection preventionist, MDS, RN/LPN, and staff educator

1. Team decides where documentation will be located in the EHR (vaccination tab). (1-2 days)
2. Team develops the required content for the vaccination tab documentation template. (1-2 days)
3. Informatics Specialist/IT creates the initial version of the vaccination tab with content for the documentation template in the EHR. (5 days)
   - Tip: Ensure the vaccination tab connects with the MDS.
4. Create a template that can be placed in progress notes to document any immunization-related conversation provided to the family or the patient.
5. Resources: CMS Regulation, State Operations Manual (SOM), and Resident Assessment Instrument (RAI)
6. Planned Small Test of Change: The team selects one unit to test the new vaccination tab and documentation template.

### Do

Carry out the test on a small scale. Document observations, including any problems and unexpected findings. Collect data you identified as needed during the “plan” stage.

**EXAMPLE:**
1. Informatics/IT/Nurse Educator educated the end-users (RN and LPN) on the vaccination tab, documentation template and progress note template. (4 days)
2. RN and LPN on the unit tested the vaccination tab and documentation templates. (1 day)
3. Informatics/Educator gathered feedback, and the team made adjustments. (3 days)

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**ACT**

What changes are we going to make based on our findings?

**PLAN**

What exactly are we going to do?

**STUDY**

What were the results?

**DO**

When and how did we do it?
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<tr>
<th>Study</th>
<th>Describe the measured results and how they are compared to the predictions.</th>
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| Study and analyze the data. Determine if the change resulted in the expected outcome. Were there implementation lessons? Summarize what was learned. Look for unintended consequences, surprises, successes and failures. | **EXAMPLE:** All residents’ charts who did or did not have an influenza vaccine are reviewed. The documentation now reflects the vaccination status in the new vaccination tab using the new documentation and progress note templates. It was determined that:  
  1. RN noted route of administration was not on the templates.  
  2. MDS nurse identified a reduction in chart review time from 20 minutes to five minutes. |

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<tr>
<th>Act</th>
<th>Describe what modifications to the plan will be made for the next cycle from what you learned.</th>
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| Based on what was learned from the test: Adapt – modify the changes and repeat the PDSA cycle. Adopt – consider expanding the changes in your organization to additional residents, staff, and units. Abandon – change your approach and repeat the PDSA cycle. | **EXAMPLE:**  
  1. Informatics/IT updates the vaccine tab and progress note templates to include the administration route.  
  2. Team selects a second unit to expand the test. |

Disclaimer: Use of this tool is not mandated by CMS, nor does its completion ensure regulatory compliance.