



Diabetes Medication Prescribing PDSA (PLAN, DO, STUDY, ACT) SAMPLE

This sample form provides facilities with a framework and ideas for developing facility-specific content and action steps. This form can be modified or utilize a blank template ([Alliant Health Solutions Blank PDSA Worksheet](#)) to create the facility-specific PDSA plan.

Facility Name: _____

CCN#: _____ Date: _____

Goal Setting: Describe the problem to be solved

State the problem.

Who, what when, where, and how long?

Hypoglycemic events in the elderly population with diabetes are common; however, recognition of hypoglycemia can sometimes be difficult and mild or asymptomatic episodes are not likely to be reported. Hypoglycemia in this age group is associated with significant morbidities, leading to physical and cognitive decline. Difficulties with recognizing hypoglycemia include symptoms being non-specific, easily misdiagnosed (vertigo, visual disturbances), misinterpreted as dementia-related symptoms (agitation, behavior changes), and patients with dementia or other cognitive impairment are often unable to communicate feelings or symptoms. Chronic consequences of hypoglycemic episodes include recurrent hospitalizations, physical decline, reduced ability to perform ADLs, frequent falls, increased risk of fractures, including hip, impaired cognitive function, and increased risk of mortality.

Example: Sliding scale insulin was identified on admission medication reconciliation without scheduled insulin.

Example: Patient is on scheduled insulin, and meals are not being delivered to the patient at consistent times.

What do you want to accomplish/ what idea do you want to test?

Identify the goal and estimated time frame for resolution.

Goal: Reduce the number of patients who experience hypoglycemic events.

Idea(s) to test:

1. Evaluate hypoglycemic episodes and adverse drug events related to diabetes medications for a root cause.
2. Avoid insulin regimens that include only short or rapid-acting insulin dosed according to current blood glucose levels (sliding scale) without concurrent use of basal or long-acting insulin.
3. Avoid long-acting sulfonylureas (chlorpropamide, glimepiride and glyburide) due to prolonged periods of hypoglycemia.
4. Notification processes are put into place for events related to hypoglycemia.
5. Implement strategies to minimize medication administration errors.

<p>What changes will result in improvement?</p> <p>e.g., safety, effectiveness, patient-centered care, timely, efficiency, equitability, etc.</p>	<p><i>What are you going to change based on your RCA (root cause analysis) that you feel will result in improvement?</i></p> <p>Changes will be made to the medication reconciliation process for evaluating certain medications, staff education process and surveillance process.</p>
<p>Who will be affected by accomplishing the goal?</p>	<p>Staff, Prescribers, Patients and Residents</p>

Plan: Describe the change (intervention) to be implemented

<p>What exactly will be done?</p> <p>e.g., initial intervention(s), expected outcome for each intervention, goal(s), and expected overall outcome goal rate in a percentage format</p>	<p><i>List interventions you will provide and your expectations for improvement rates.</i></p> <ol style="list-style-type: none"> 1. Establish a QAPI team (recommended composition includes pharmacist, medical director or designated prescriber, nurse leader, front line staff, patient/resident and/or family representative) by (insert date) to: <ol style="list-style-type: none"> a. Conduct a review of current patients and residents with active diabetes medication orders that include sliding scale insulin alone or long-acting sulfonylureas. b. Establish a baseline to measure improvement. c. Identify trends (insert date established in collaboration with the medical director). d. Conduct ongoing surveillance of sliding scale insulin and long-acting sulfonylurea orders. e. Establish a process for flagging, reviewing and taking actions for any new hypoglycemic episode—regardless of the current medication regimen. f. Establish criteria for recommending referral to an endocrine management specialist (if available in the provider service area). 2. Implement hypoglycemia management order sets if not already established. 3. Collaborate with the facility medical director to educate prescribing staff by (insert date) on hypoglycemia management and not prescribing sliding scale insulin alone or long-acting sulfonylureas. 4. Provide training for all clinical staff by (insert date) and incorporate training on signs and symptoms of hypoglycemia, establishing communication for patients on any medication that can cause hypoglycemia, hypoglycemia management, alerting charge nurse/medical director/pharmacist of episodes of hypoglycemia into: <ol style="list-style-type: none"> a. New hire orientation b. Annual competency reviews 5. Review Emergency boxes inventory to ensure Glucagon or D50W is available in Emergency boxes on all units by (insert date). 6. Establish a process for quarterly review of Emergency boxes to ensure Glucagon or D50W is not expired. 7. Collaborate with the medical director to establish a process for the prior approval or review of hypoglycemic agents or other agents known to cause hypoglycemia. The process should include discharge orders to the next level of care.
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	<ol style="list-style-type: none"> 8. Revise admission process by (insert date) to include identification of: <ol style="list-style-type: none"> a. Indication and dose of hypoglycemic agents b. Prescribing physician c. Interdisciplinary team members to notify (nurse leader, medical director or QAPI team member) of any new admission with a hypoglycemic order) 9. Develop and implement a plan to communicate initiative goals to referring hospitals by (insert date). (Note: Consider transfer process that includes Physician- to-Physician communication for care management/discharge planning). 10. Develop and implement a plan to communicate initiative goals to patients, residents, families, health care agents and care partners by (insert date). 11. Establish a schedule for a review of hypoglycemia episode and insulin/long-acting sulfonylurea data by the QAPI committee.
Who will be responsible for implementing the change?	<i>Usually, leadership for QAPI methodology. This person will support and supervise the process the team is working on.</i>
Where will it take place?	<i>Where and when will you provide the interventions listed?</i>
What will be measured? Describe the measure(s) to determine if prediction succeeds.	<i>What data or outcome will you measure?</i> Number of patients/residents with orders for sliding scale insulin alone or long-acting sulfonylurea. Number of patients with an episode of hypoglycemia.
Who will be responsible for measuring the data?	<i>This can be a group or an individual.</i>
How will the data be collected/computed/analyzed?	<i>Identify process owner(s) for data collection and schedule for review and analysis</i>
What is the current data figure for that measure? e.g., count, percent, rate, etc.	<i>Baseline</i>
What should the number increase/decrease to in order to meet the goal?	<i>Goal rate should show improvement from baseline.</i>
Did you base the measure or figure you want to attain on a particular best practice/average score/ benchmark?	<i>Based on: American Geriatrics Society Beers Criteria for Potentially Inappropriate Medication Use in Older Adults</i>

Do: Implement Change

Enrollment in upcoming learning collaborative. The learning collaboratives will provide group technical assistance using a data-driven, action-oriented approach. Unlike individual learning, people engaged in learning collaboratives capitalize on one another's resources and skills.

Was the plan executed?

Yes, on (what date did you do the first audits)

How long was the plan executed?

You will answer this at the conclusion of your project.

Document any unexpected events or problems

Put employee comments, change in staff and any other events that affected the outcomes here.

Describe what actually happened when you ran the test

e.g., the indicators measured, the adoption of the change by staff, process change, etc.

Did you see improvement in reducing opioids? What feedback did the team observe/receive around the use of the comfort menu?

Study: Review and Reflect on Results of the Change

Scheduled monthly check-in with Alliant Health Solutions will include data analysis and building sustainability.

Describe the measured results and how they compared to the predictions

State at least 1 or more interventions that contributed to the improvement of the problem

Did you see the outcome you expected? What interventions made the improvement possible?

Graphically illustrate data improvement comparison from baseline to current data in percentages.

Baseline= %
Weekly or monthly audits = %

Is this change likely to continue? Identify at least one or more of the continued sustainable interventions that addresses the problem	<i>Answer here if your intervention(s) led to an improvement in opioid prescribing practices and reduction efforts.</i>
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Act: Determine the Action Needed Based on Results of the Change

Monitor data and adjust interventions/tactics.

What will you take forward from this PDSA?	<i>Answer here (later) if you will Adopt, Adapt, or Abandon this Plan.</i>
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Describe what modifications to the plan will be made from what you learned	<i>If you make changes or additions to this process, add changes here as an adaptation</i>
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Intervention/Improvement Details: (sample action steps)

Action Step	Start Date	Target Completion Date	Person Responsible	Monitoring Strategy	Findings and Lessons Learned	Outcome, Recommendations and Next Steps
Conduct a review of all hypoglycemic episodes			Nurse Manager	QAPI to review		
Develop a strategy to establish framework for: -Changing any order for sliding scale insulin alone on admission -Changing any order for a long-acting sulfonyleurea on admission -Education to prescribers to avoid new orders for sliding scale insulin alone and long-acting sulfonyleureas			QAPI Team	QAPI to review		
Randomly select 10% of staff (include staff from all shifts, staff, and agency...) and interview to determine: -Knowledge of signs/symptoms of hypoglycemia -Knowledge of action steps for a hypoglycemic episode -Knowledge of medication that can cause hypoglycemia -Knowledge of names of long-acting sulfonyleureas			Admin	Scheduler to audit selection to ensure inclusive of weekend staff, all shifts, PRN and contract agency staff.		

Findings from the Root Cause Analysis:

Category	Barriers Identified

Communication/Notes:

Additional Resources:

[Management of Diabetes in Long-term Care and Skilled Nursing Facilities: A Position Statement of the American Diabetes Association](#)

[Communication Checklist: Signs and Symptoms of Hyper or Hypoglycemia with Diabetes](#)

[ISMP Medication Safety Self-Assessment for High-Alert Medications](#)

[Hypoglycemic Event Analysis Tool \(HEAT\)](#)

[Consumer Med Safety High-Alert Guides](#)

[Diabetes Zone Tool](#)

[American Diabetes Association: Hypoglycemia](#)

[Hypoglycemic Agent Adverse Drug Event Gap Analysis](#)

[National ADE Action Plan Diabetes Agents](#)