



GWTG–Stroke PDSA Case Review: Lipid Profile

Scenario: ABC Hospital ran a report (Lipid LDL100 RXDC) via the Patient Management Tool (PMT) to analyze their adherence rate to a particular guideline (referenced below). The report showed that only 58% of appropriate patients had lipid levels drawn and documented upon admission. As a Get With The Guidelines (GWTG) participating hospital, the goal is to obtain a sustained adherence rate of 85% or higher. To reach their goal, ABC Hospital will implement change utilizing the Plan Do Study Act (PDSA) quality improvement methodology.

Guideline: Assess fasting lipid profile on all patients admitted with a diagnosis of AIS/TIA.

Conclusion: Three PDSA cycles comprised small-scale testing of three process improvements: Revising the standing order set by adding a checkbox for the lipid profile, notifying the attending if no lipid profile appeared in the patient order and concurrent use of the PMT to check guidelines prior to discharge. Each PDSA test of change brought the team closer to their goal. By completion of the third cycle, ABC Hospital not only met, but exceeded their goal. For details on how the PDSA methodology was applied to meet this particular goal, see PDSA Methodology chart below.

These new process improvements will be implemented and standardized so that quality improvement is continuous. Other stroke guidelines will be analyzed and handled in the same manner to improve quality of care and meet GWTG Performance Achievement criteria.

PDSA Methodology:

PDSA Cycles	PLAN Plan out the details of your test.	DO Carry out small scale test of change.	STUDY Gather data and analyze impact of change. Was goal met?	ACT If objective was met, implement on wide scale. If not, go through another PDSA cycle.
Cycle 1	Current standing order sets include a check box for the physician to mark for specific orders. The plan is to incorporate a check box into the standing orders sets for all ischemic stroke and TIA patients to include fasting and lipid profile labs within 24 hours of admission.	A two-week time frame was utilized to implement and test for change, the newly revised standing order sets for all AIS/TIA patients.	Analysis of Lipid LDL100 RXDC report shows that institution of standing order sets with check box for lipid profile provided a 12% improvement in adherence bringing the overall adherence rate from 58% up to 70%. Goal was not met.	Since goal of sustained 85% adherence was not met, modify the plan and go through another PDSA cycle to test the change.
Cycle 2	It is believed that not all physicians are remembering to check off box for lipid profile labs, so the plan will now add another level where clinical staff will be trained to notify the attending if no fasting lipid profile is in patient order.	Test will be conducted over a three-week period. Interventions to train staff included: <ul style="list-style-type: none"> Physician/resident/nurse patient education sessions Revision of stroke clinical pathways and protocols Inclusion in Physician Stroke Newsletter (communicates to 875 physicians) 	Three weeks after communicating new process to staff analysis of Lipid LDL100 RXDC report shows an additional improvement to 81%. Goal was not met.	Since goal of sustained 85% adherence was not met, modify the plan and go through another PDSA cycle to test the change.
Cycle 3	Since ABC Hospital is currently utilizing the Stroke Patient Management Tool (PMT) as a retrospective tool, the plan is to begin concurrent use of PMT and check each patient against the guidelines prior to discharge.	Test will be conducted over a two-week period. Staff was notified of new process through: <ul style="list-style-type: none"> Physician/resident and nurse education sessions Inclusion in Physician Stroke Newsletter (communicates to 875 physicians) Training of designated staff for concurrent data collection 	Two weeks after initiating concurrent PMT use combined with the previous two improvements, analysis of Lipid LDL100 RXDC report showed that adherence rate has reached 87%. Goal was met.	Implement all three process improvements on a wide scale in an effort to sustain 87% adherence or higher.