### **CATCH RURAL Falls**

<u>Coordinated Action Toward</u> <u>Community Health: RedUce</u> <u>Risk And Limit Falls</u>

Applying Plan-Do-Study-Act (PDSA)

Cycles to Improve Assessment of Home

Safety Concerns



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## Introductions and Contact Information

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### **Educational Objectives**

- Describe the intended purpose of Plan-Do-Study-Act (PDSA) cycles
- Describe each element of a PDSA cycle
- Apply the PDSA approach to improve assessment of home safety concerns in your clinic

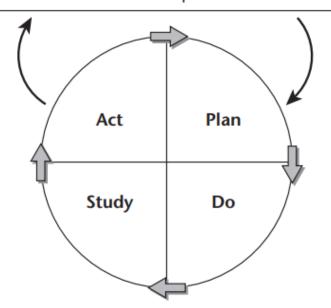


## The Model for Improvement

What are we trying to accomplish?

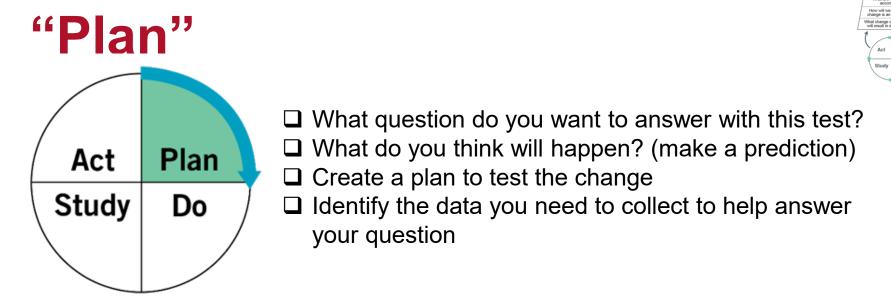
How will we know that a change is an improvement?

What change can we make that will result in improvement?



- ✓ Provides a framework for developing, testing, implementing, and spreading changes that result in improvement
- Can be applied widely to many different types of problems and situations
- Attempts to balance careful study with action
- Emphasizes and encourages

   'trial-and-learning' as an iterative
   process for improvement
- ✓ Allows project plans to adapt as learning occurs



**Questions to Answer:** To what extent will our clinic increase our rate of assessment of home safety concerns using a standardized guide for patients aged 65 and older who screened positive for fall risk and are currently living in their own home? What will staff report as facilitators and barriers to completing this assessment?

**Predictions:** The rate of assessment of home safety concerns will increase from 25% to 50% over the next two weeks. Staff will identify successes and barriers to assessing home safety concerns that will be addressed in the next test of change.

**Plan:** During the next two weeks, all older adult patients who screened positive for fall risk will be asked about safety concerns in their home that may increase fall risk using a standardized guide. Staff were provided with in-person training and written instructions for how to use the guide to lead the discussion.

**Data to collect:** In order to calculate rates of assessment of home safety concerns for eligible patients, we will collect data from the medical records of all older adult patients who screened positive for fall risk during the two-week trial timeframe. We will need to determine which of those patients do and do not have home safety concern assessment results documented in the EMR. The completion rate = those who have documentation of a completed assessment of home safety concerns divided by the number of older adult patients who screened positive for fall risk and are currently living in their own home. Staff will also document their experience/observations of the current process for assessing home safety concerns in a separate document.

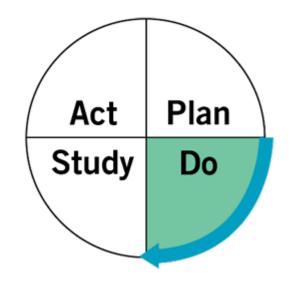
### **Checklist for Developing the Plan**

- □ Establish the objective of the test
- ☐ Ensure key background information is available to understand the plan
- □ Be clear about the change(s) to be tested in this specific cycle
- □ Specify the question(s) to be answered
- □ Specify the measures that will be collected in this specific test cycle

- ☐ Establish the test design
- ✓ Specify the scale of the test
- ✓ Clarify the people or things selected for this test and your sampling strategy
- ✓ Clarify the when and where
- ✓ Describe the test design
- ✓ Describe the method of data analysis planned for the 'study' phase
- Discuss the possible influential uncontrolled conditions
- □ Generate your predictions about what will happen (related to the question(s) to be answered in this test cycle)







- ☐ Run your test
- ☐ Collect and monitor data
- □ Document any successes, issues, problems, unexpected observations along the way

- Plan is initiated. For two weeks the clinic will run a trial to offer an assessment of home safety concerns to all patients ages 65 and older who screened positive for fall risk and are currently living in their home.
- Feedback is solicited from staff at the regular monthly staff meeting 1 week later. Staff anecdotally report that conversations about home safety concerns are taking a little longer than expected, as the standardized guide has helped to identify a number of home safety concerns that will need to be addressed to reduce the patients' risk of a fall in their home setting. Some patients have been a bit hesitant to discuss their concerns when a family member or caregiver is present at the appointment. All patients expressed appreciation for the guide and the ability to take it home with them to review in their home environment. There was not enough time in the appointment to discuss home safety concerns for two patients due to other pressing concerns that needed to be addressed in the appointment. They were sent home with the checklist to review independently.
- Staff encouraged to continue to document their experience/observations.
- After the two weeks are complete, data are pulled from the medical record for analysis. The experiences/observations documented by staff are also compiled.





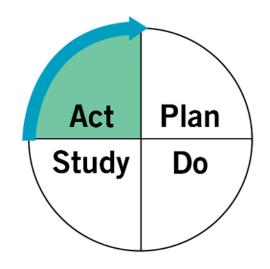


- Analyze your data for this test
- Compare your data to the prediction made for this test
- ☐ Summarize what was learned from this test

- Analysis reveals that rate of assessment of home safety concerns increased from 25% to 60%.
- Staff meet again to discuss the improvement observed, successes and barriers, and brainstorm next steps.
- Discussion about the test of change reveals the following:
  - Staff reported that they liked the standardized guide to help identify home safety concerns.
  - The process is taking longer than expected, primarily because the process has helped to identify multiple home safety concerns.
  - In some situations, presence of a family member or caregiver appeared to stifle the patient's willingness to discuss home safety concerns. In these cases, staff wondered if this was driven by a concern that the home environment could not be modified (or modified well-enough), and as such the patient may need to consider other living options to support their safety.
  - Patients liked the ability to take the standardized guide home with them to review while in their home environment.
  - In addition to reflections on the process, staff wanted to discuss next steps for how to connect patients with appropriate resources for intervention, including a referral for occupational therapy.







- Decide to:
  - ☐ Adapt modify and run another test
  - ☐ Adopt test the change on a larger scale
  - ☐ Abandon do not run another test on this
    - change
- ☐ Create a plan for the next PDSA cycle

#### Adaptations/Plan moving forward:

- Staff decided to continue to use the standardized guide for assessment of home safety concerns.
- Staff want to track how long this assessment takes in a next test of change, and then discuss any potential changes to the process moving forward.
- Future steps include discussions in the clinic about interventions for home safety, including referral to
  occupational therapy and connecting patients with community resources to make modifications that require
  handyman skills.
- Additional discussion topics included how to follow-up with patients to see if they made any changes to address home safety concerns



### Rapid Cycle PDSA Testing: Assessment of Home Safety Example

Cycle	Plan	Do	Study	Act
1	Staff will follow a standardized guide to conduct an assessment of home safety concerns for patients ages 65 and older who screen positive for fall risk and are still living in their home.	For 2 weeks, all patients ages 65 and older who screen positive for fall risk during their visit and are still living at home will be offered an assessment of home safety concerns.	Examine rate of assessment of home safety concerns for eligible patients. Ask staff about process and explore reasons behind successes and barriers.	Keep process. Staff will track approximately how long the assessment takes in the next test of change.
2	Staff will follow a standardized guide to conduct an assessment of home safety concerns for patients ages 65 and older who screen positive for fall risk and are still living in their home.	For 2 weeks, all patients ages 65 and older who screen positive for fall risk during their visit and are still living at home will be offered an assessment of home safety concerns.  Staff will track the length of these conversations.	Examine rate of assessment of home safety concerns for eligible patients. The conversations are taking longer than expected.	Keep standardized guide as it is thorough. Have patient review checklist from the guide between the positive fall screen and when the provider or nurse returns to the room. This may help streamline the process.
3	Staff will have patients eligible for the home safety assessment review the checklist after they are roomed and are waiting for the nurse/provider.			

### PDSA Self-Assessment



- ✓ PDSA cycles are rarely intended to be a 'one-and-done' situation
- ✓ Start with small scale tests of change with a series of follow-up tests before making changes on a larger scale
- ✓ Use a variety of measures to evaluate the changes and their implementation
- ✓ Identify and address implementation barriers
- ✓ Refinement is expected this is 'trial-by-learning' for improvement

### **Summary: Review of Objectives**

- The Model for Improvement and PDSA cycles are useful tools to guide efforts to improve assessment of home safety concerns
- Create a clear, focused plan for a small test of change to help you get started
- Be clear on what question(s) you are trying to answer to help inform the data you need to collect in each test of change
- Remember this is an iterative process to support change over time

## Model for Improvement Resources

Institute for Healthcare Improvement. QI Essentials Toolkit: PDSA Worksheet



