

# Plan-Do-Study-Act: A Tool for Testing

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# Your Feedback is Important!

## Chat Feature Highly Encouraged

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- 2 In the **Send to** or **To** drop-down list, select the recipient of the message.
- 3 Enter your message in the chat text box, then press **Enter** on your keyboard.

***Send Chat  
Message to  
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# Chat In

Please use the chat feature to share your name, organization and state.



**Who's Around  
the Virtual Table**



# Welcome! So Glad You Joined us Today!



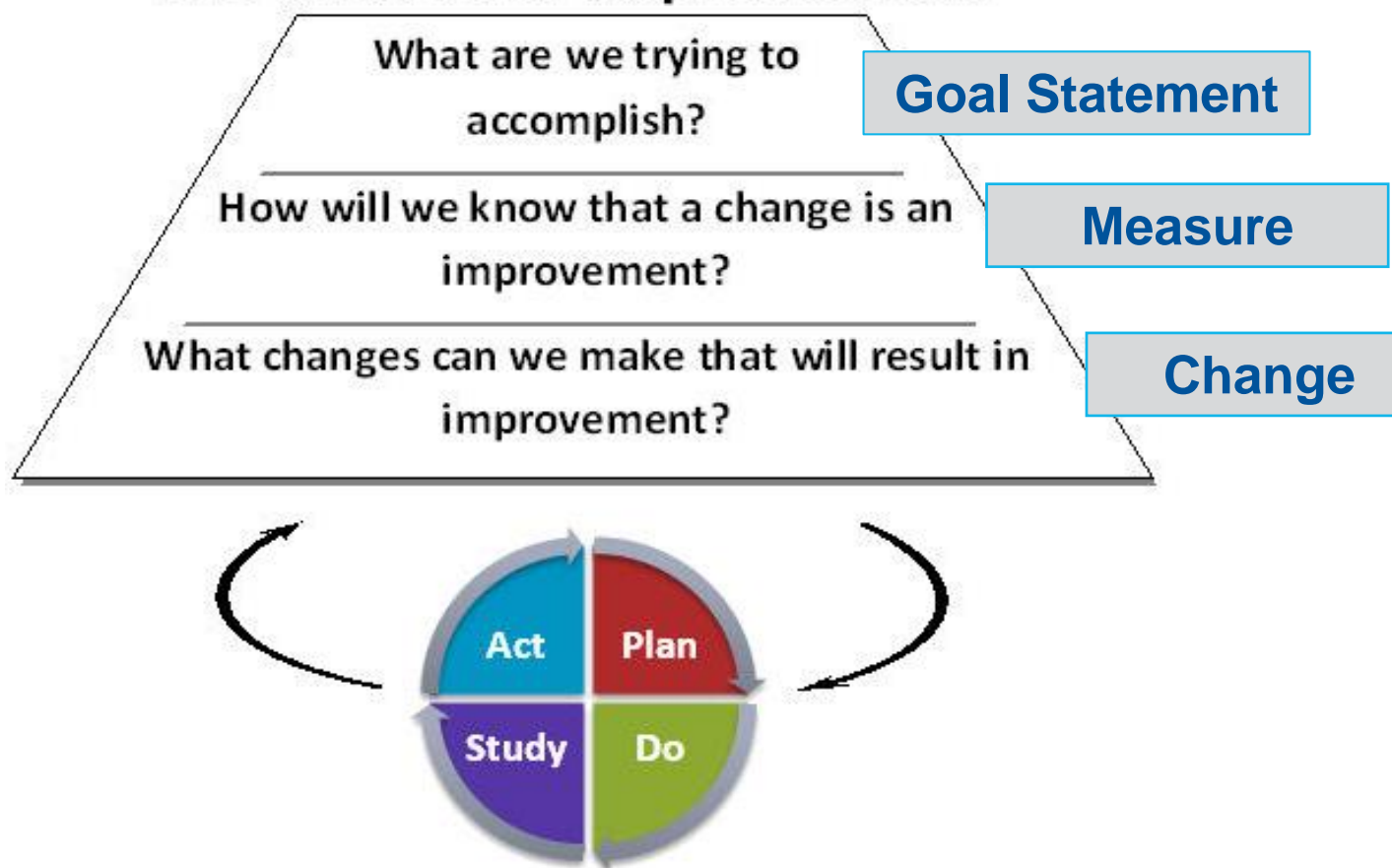
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## Objectives

- Model for Improvement & SMART goal review
- Discuss the importance of testing changes
- Use the Plan-Do-Study-Act (PDSA) cycle
- Summarize the three learning session information

# Three Fundamental Questions from the Model for Improvement

## The Model for Improvement





# Setting the Stage: Developing SMART Goals



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**S**pecific  
**M**easurable  
**A**ttainable  
**R**elevant  
**T**ime-bound



# The Benefits of Testing the Changes



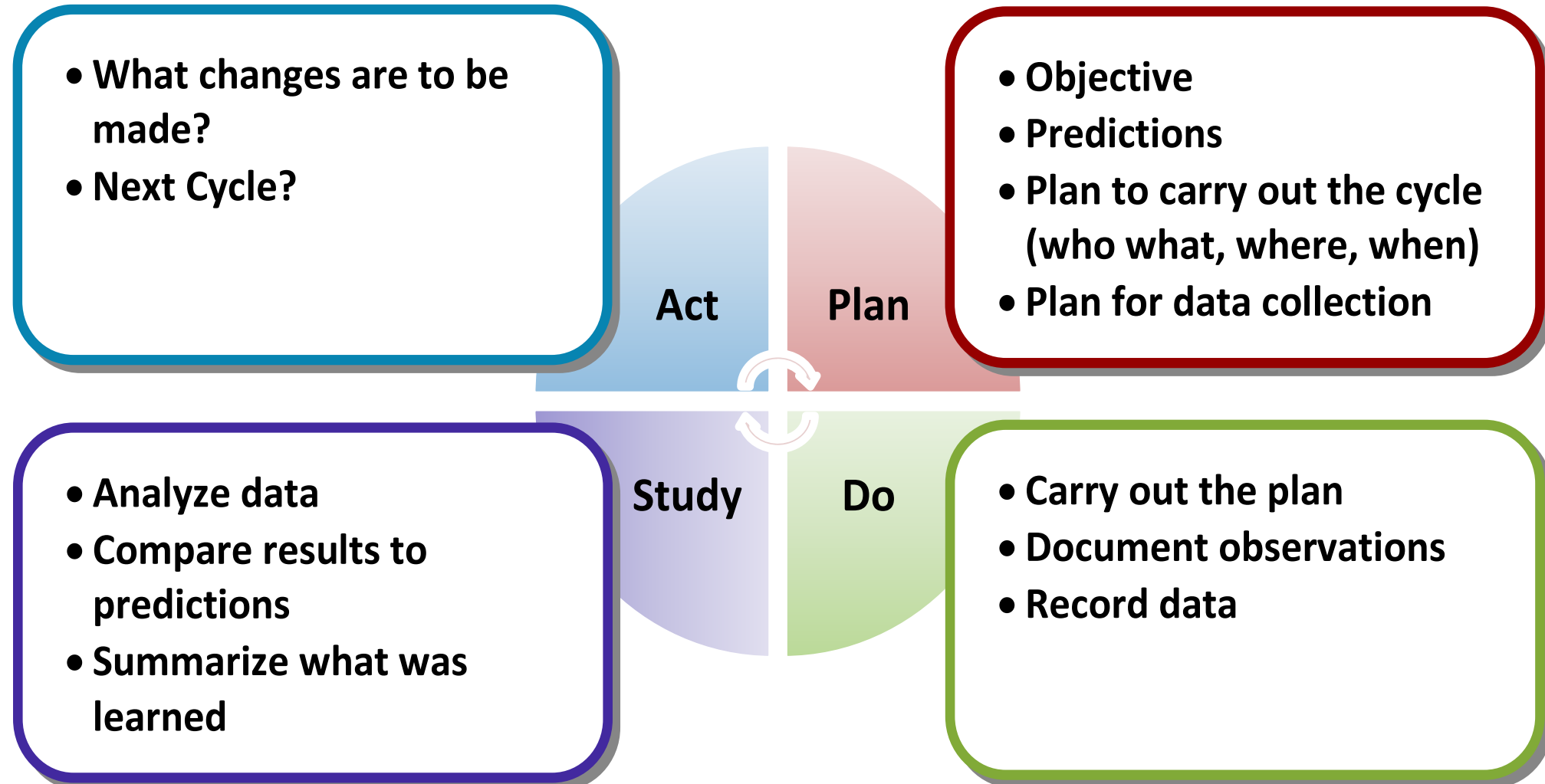
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- Increase your belief that the change will result in improvement
- Document how much improvement can be expected from the change
- Learn how to adapt the change to conditions in the local environment
- Evaluate costs and side-effects of the change
- Minimize resistance upon implementation

# The PDSA Cycle for Learning and Improvement

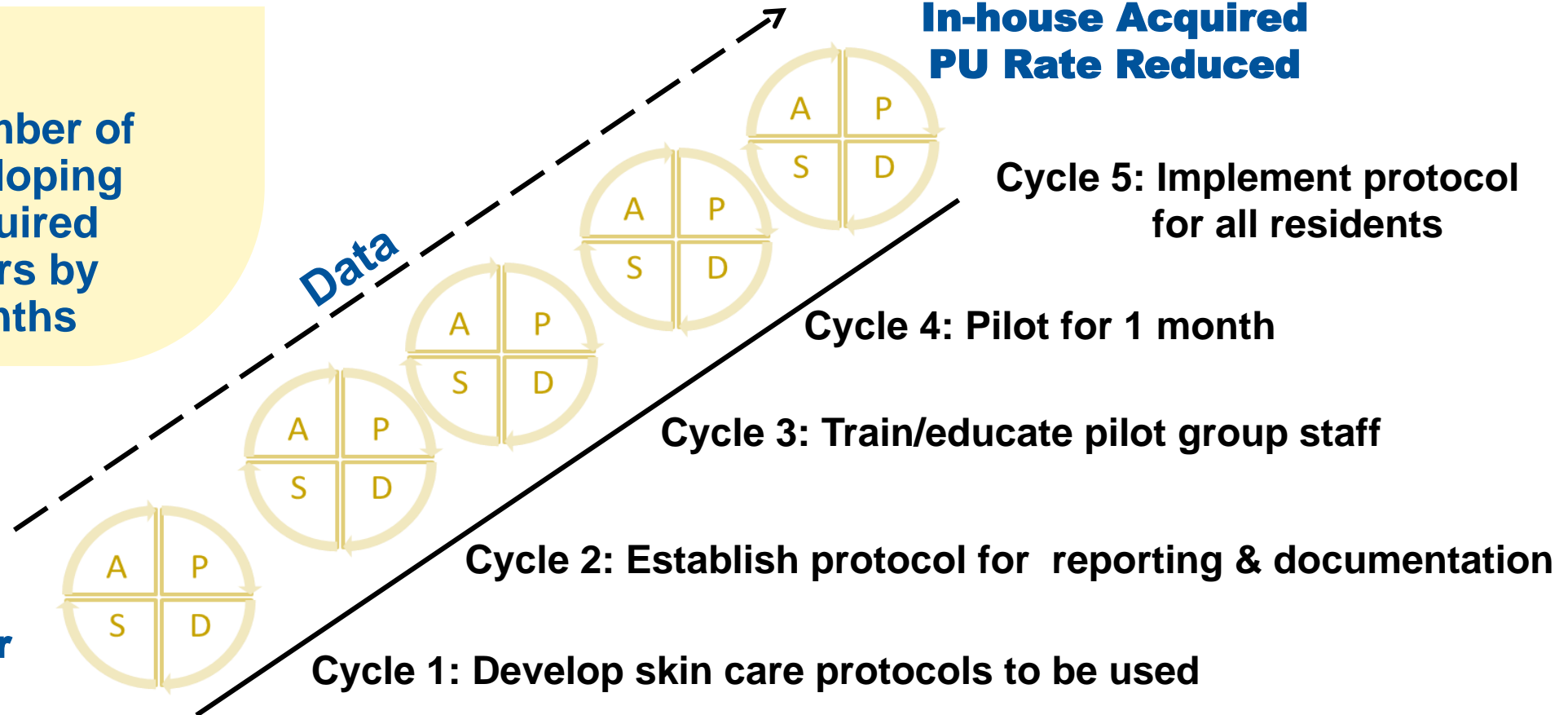


# The PDSA Cycle

## Goal:

Reduce the number of residents developing in-house, acquired pressure ulcers by 20% in 3 months

**Implement pressure ulcer prevention protocols as best practice**



# Keys to Successful Cycles to Test Changes



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**Plan multiple cycles for testing a change**  
(Think a couple of cycles ahead)

**Scale down size of test**  
(# of residents, sites)

**Do not try to get consensus or ownership at this time**

**Collect useful data during each test**

**Test over a wide range of conditions**

# Keys to Successful Data Collection During PDSA Cycles



**Collect useful, not perfect data. The purpose is learning, not evaluation.**



**Use a pencil and paper until the information system is ready.**



**Use sampling as part of the plan to collect the data.**



**Use qualitative data rather than wait for quantitative.**



**Record what went wrong during the data collection.**

# Use Your Graphs to Tell Your QI Story

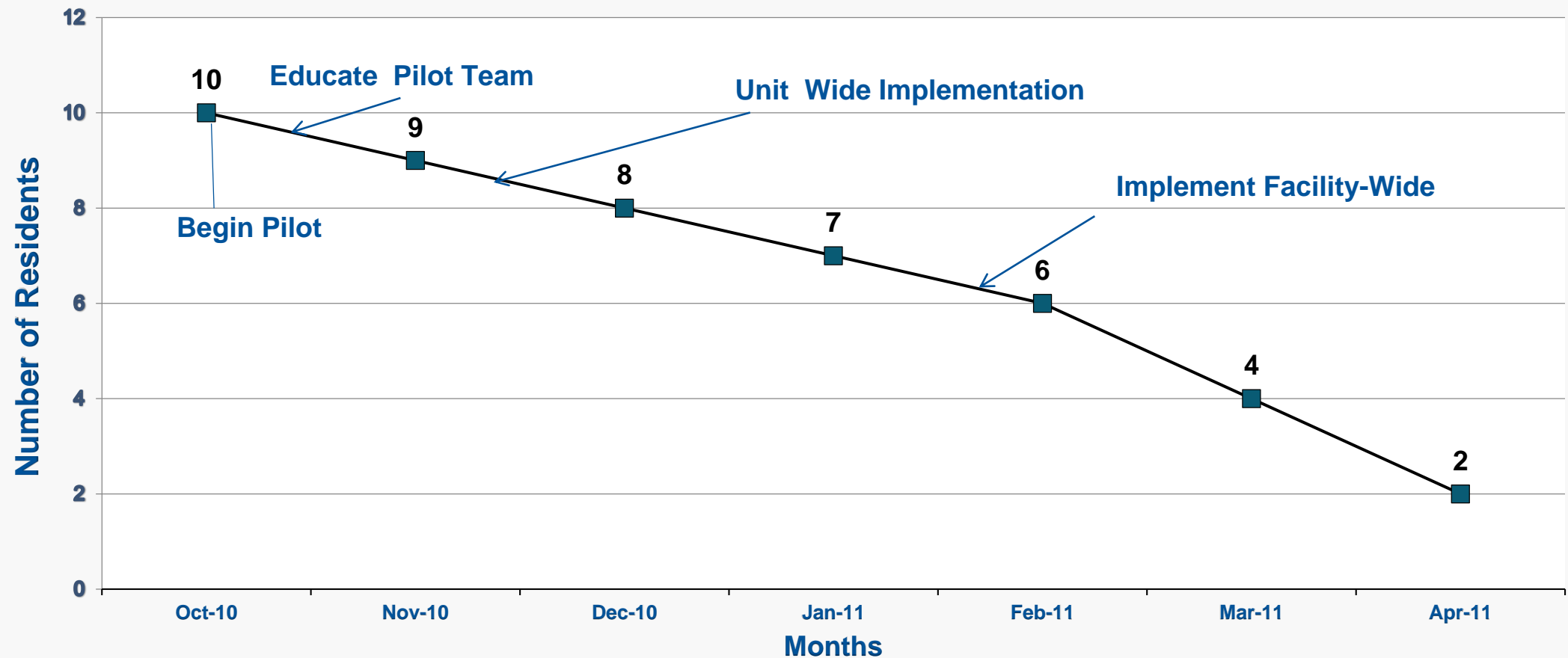


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## Number of Residents with Nosocomial Pressure Ulcers



# Setting the Stage to Begin the Testing

## Step 1: Develop a Goal

- Identify your goal statement.
- What do you want to improve?
- What change do you want to make?

## Step 2: Develop 1 Outcome Measure and Process Measure

- Write 1 outcome and process measure.
- How will you know your change is an improvement?

## Step 3: Develop First Test

- Develop the first test cycle for your plan.
- What change can you make that will result in improvement?

# Lovely Nursing Home Falls Investigation



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# Lovely Nursing Home PIP Team Challenge



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## Issue: Number of Residents Falling is Increasing

- During the monthly QAPI steering committee meeting at Lovely NH a trend over the last 2 months was observed.
- QAPI Steering Committee chartered a performance improvement project (PIP) team to further investigate these trends and develop an initial plan to address the issue.

# Lovely Rocking Horse NH PIP Team Challenge



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## Instructions

- Look at the numbers in the data table for the falls measure.
- After reviewing the data table:
  - What patterns do you see?
  - What questions do you need to ask and who?
  - What actions will the team need to do?

# What Does the Data Show Us?

## Falls Tracking Tool- 1/2020 -- 3/2021

Facility Name: **Lovely NH**      Unit B Wing

Date	# of Falls this month	# of Falls with injury this month	Monthly Census	% of Falls this month	% of Falls w/ injury this month	# of falls in or transfers. to the bathroom	# of falls out of bed	# of falls from chair/WC	# of falls while walking	# of falls occurring on Week End	# of falls occurring on 3-11 or night shift	Other
20-Jan	49	3	241	20.30%	1.20%	2	35	0	11	9	24	0
20-Feb	32	0	251	12.70%	0.00%	4	22	0	6	5	18	0
20-Mar	32	3	249	12.90%	1.20%	0	17	0	12	11	19	0
20-Apr	36	0	248	14.50%	0.00%	6	22	5	4	5	28	0
20-May	43	0	250	17.20%	0.00%	4	19	17	4	10	27	0
20-Jun	42	1	238	17.60%	0.40%	2	22	13	3	12	24	0
20-Jul	43	2	250	17.20%	0.80%	7	25	5	6	6	19	0
20-Aug	49	2	250	19.60%	0.80%	6	20	6	5	8	20	0
20-Sep	50	3	249	20.10%	1.20%	5	22	7	7	7	24	0
20-Oct	51	1	249	20.50%	0.00%	6	23	5	6	10	26	0
20-Nov	51	0	251	20.30%	0.00%	7	22	4	4	9	28	0
20-Dec	52	1	250	20.80%	0.40%	8	24	6	6	8	26	0
21-Jan	53	4	249	21.30%	1.60%	6	25	5	7	7	28	0
21-Feb	54	2	248	21.80%	0.80%	4	22	6	7	8	30	0
21-Mar	55	1	251	21.90%	0.40%	5	23	5	6	9	29	0

# What Did The Data Tell You?

## Observation

**Number of falls increasing past 5 months.**

**More than Half of the falls are on the off shifts (eve and nights).**

**20% of the falls on this unit are residents getting OOB.**

## Questions

**What are residents trying to do before falling OOB?**

**What are the times of the falls on eve and nights?**

**What is staff's routine at the time of the falls?**

# For Example...

## **Step 1:** Develop a Goal

- B wing has an increasing number of falls per month. Reduce the number of falls on B wing by 12 over the next 6 months. This will be done through implementing our falls prevention protocol as written.

## **Step 2:** Develop 1 Outcome Measure and Process Measure

- Outcome- Percent of residents who experience a fall will decrease.
- Process –100% of residents will receive a fall risk screening upon admission.

## **Step 3:** Develop First Test

- 1st cycle- Revisit and revise fall prevention protocol.

# Successful Change Requires A Plan



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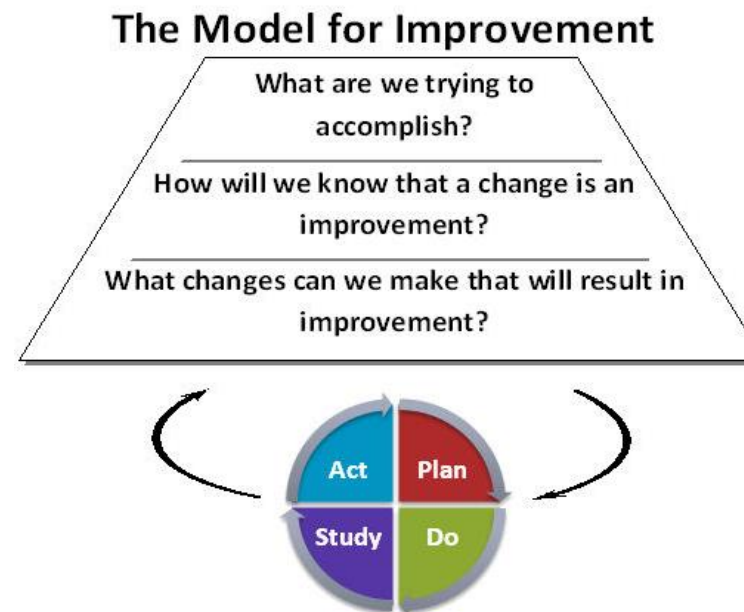
**Identify where  
implementation will  
take place**

**Engage management  
structures to make  
the change  
permanent**

**Change must be  
“turnover proof”**

# In Summary...

- We reviewed the components of a SMART goal and the Model for Improvement questions to develop a QI plan
- Discussed using the Plan-Do-Study-Act (PDSA) cycle tool to test changes





# Questions

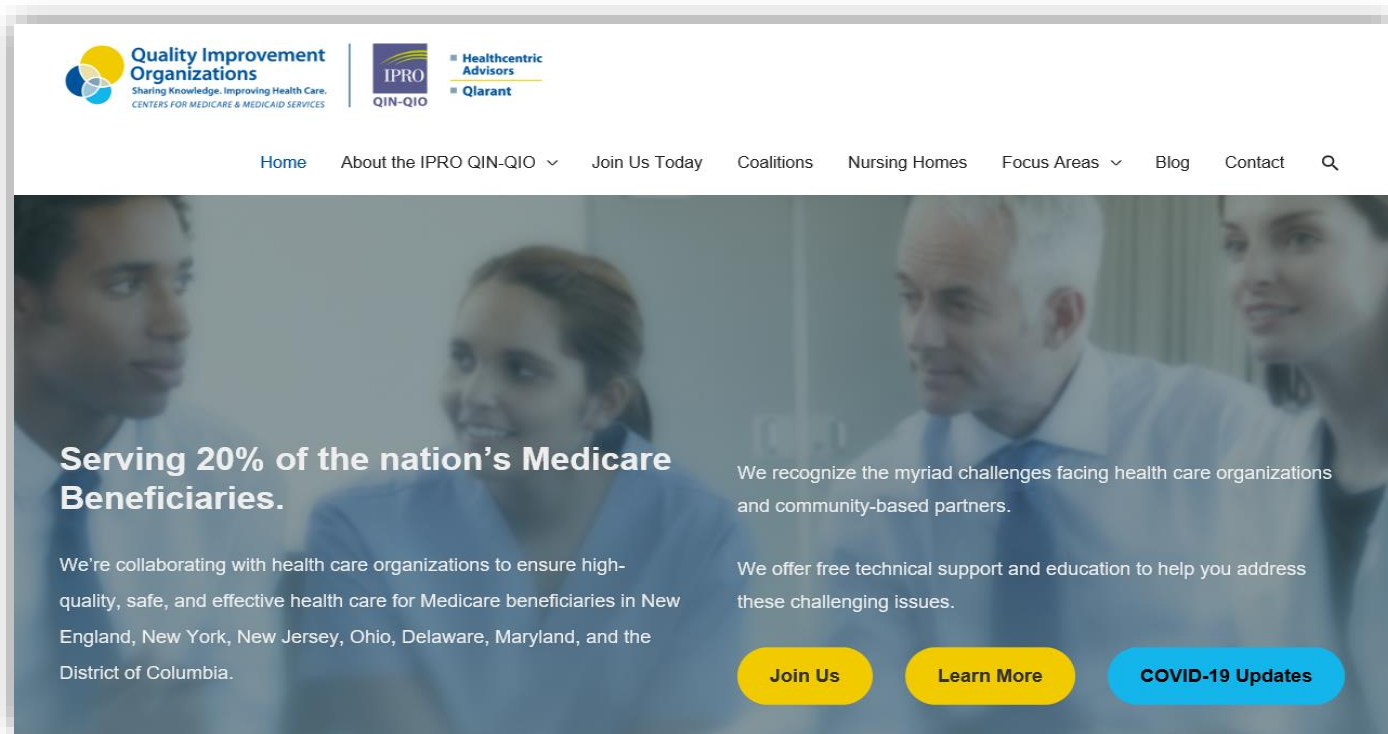
# Comments

# Feedback

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<https://qi.ipro.org/>

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The screenshot shows the homepage of the Quality Improvement Organizations (QIO) website. The header includes the QIO logo, the IPRO QIN-QIO logo, and the Qlarant logo. The navigation menu includes Home, About the IPRO QIN-QIO, Join Us Today, Coalitions, Nursing Homes, Focus Areas, Blog, and Contact. The main content area features a large image of four healthcare professionals in a meeting. The text on the page reads: "Serving 20% of the nation's Medicare Beneficiaries. We're collaborating with health care organizations to ensure high-quality, safe, and effective health care for Medicare beneficiaries in New England, New York, New Jersey, Ohio, Delaware, Maryland, and the District of Columbia. We recognize the myriad challenges facing health care organizations and community-based partners. We offer free technical support and education to help you address these challenging issues." At the bottom, there are three buttons: "Join Us", "Learn More", and "COVID-19 Updates".





**Thank you for your  
continued efforts  
to keep us safe.**



# For More Information

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