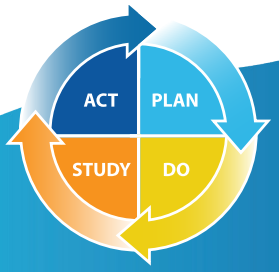
# Infection Prevention Guide




**QUALITY ASSURANCE & PERFORMANCE IMPROVEMENT (QAPI)**

## This Quick Guide will assist in starting a Performance Improvement Project (PIP) for your Quality Assurance Performance Improvement (QAPI) Program

According to the Centers for Disease Control and Prevention (CDC), over 4 million Americans are admitted to or reside in nursing homes and skilled nursing facilities each year, and nearly one million persons reside in assisted living facilities.[1] The CDC also states that data about infections in long term care facilities (LTCF) are limited, but it has been estimated in medical literature that:

- 1 to 3 million serious infections occur every year in these facilities.
- Infections include urinary tract infections, diarrheal diseases, antibiotic-resistant staph infections and many others.
- Infections are a major cause of hospitalization and death; as many as 380,000 people die of the infections in LTCFs every year.

In light of these issues facing nursing home residents, it is important for all staff in long term care facilities to work together to reduce or prevent infections using QAPI principles in the pursuit of providing a safe care environment for all.

### This quick guide can assist in initiating a QAPI Performance Improvement Project (PIP) through these steps:

- Setting a stretch, yet attainable, project goal.
- Conducting a root cause analysis and initial assessments.
- Developing quality measures for tracking and trending.
- Creating an action plan to improve with a plan for sustainability.

### To get started, choose interdisciplinary PIP team members. This might include:

- Front line staff
- Resident and/or family members
- Pharmacist and pharmacy team
- Infection Control staff
- Other key clinical staff
- Leadership

### Your first step is to obtain your baseline data and initial project information for this infection control project to better understand how to set goals, track improvement, and achieve sustainability. Therefore; before you start using this guide, gather the following (as applicable):

- Infection control reports, antibiograms, antibiotic usage reports.
- Antibiotic reports from your consultant pharmacist and/or laboratory.
- Your current CASPER and Resident Roster Mix Report.
- Any pertinent chart review information.

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1 Centers for Disease Control and Prevention, Nursing Homes and Assisted Living (Long-term Care Facilities – LCTFs). June 2020. https://www.cdc.gov/longtermcare/index.html

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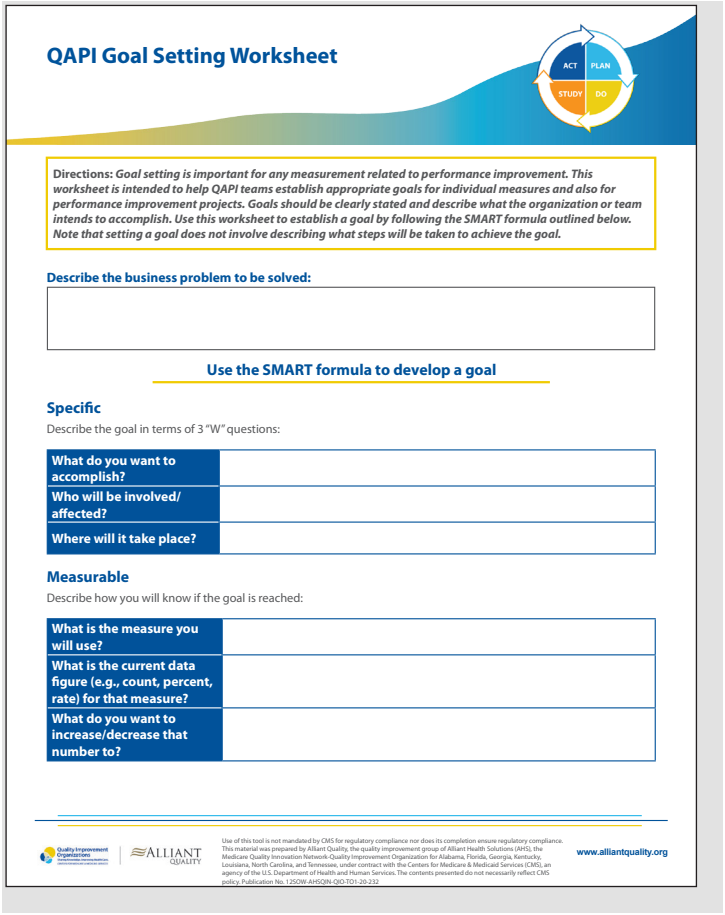
# Step One: Goal Setting for Your PIP Infection Control Project

Goal setting is important because you can quantify a measurable improvement result without guessing.

Goals should be a stretch for your team to achieve, yet attainable through hard work. They should be clearly stated and describe what you intend to accomplish.

It's recommended your PIP goals follow the **SMART** formula: Specific, Measurable, Attainable, Relevant and Time-Bound, which is easily built into Alliant Quality's goal setting worksheet. Download this Alliant Quality resource here:
**QAPI Goal Setting Worksheet**



## QAPI Goal Setting Worksheet

ACT PLAN STUDY DO

**Directions:** *Goal setting is important for any measurement related to performance improvement. This worksheet is intended to help QAPI teams establish appropriate goals for individual measures and also for performance improvement projects. Goals should be clearly stated and describe what the organization or team intends to accomplish. Use this worksheet to establish a goal by following the SMART formula outlined below. Note that setting a goal does not involve describing what steps will be taken to achieve the goal.*

**Describe the business problem to be solved:**

**Use the SMART formula to develop a goal**

### Specific

Describe the goal in terms of 3 "W" questions:

| | |
|---|---|
| **What do you want to accomplish?** | |
| **Who will be involved/ affected?** | |
| **Where will it take place?** | |

### Measurable

Describe how you will know if the goal is reached:

| | |
|---|---|
| **What is the measure you will use?** | |
| **What is the current data figure (e.g., count, percent, rate) for that measure?** | |
| **What do you want to increase/decrease that number to?** | |

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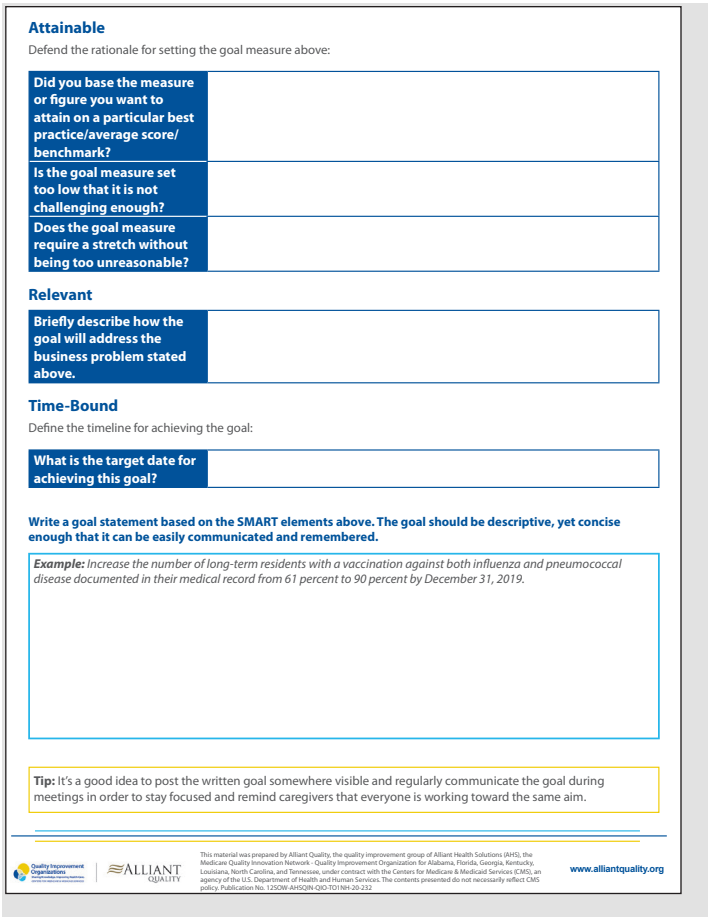

### Attainable

Defend the rationale for setting the goal measure above:

| | |
|---|---|
| **Did you base the measure or figure you want to attain on a particular best practice/average score/ benchmark?** | |
| **Is the goal measure set too low that it is not challenging enough?** | |
| **Does the goal measure require a stretch without being too unreasonable?** | |

### Relevant

| | |
|---|---|
| **Briefly describe how the goal will address the business problem stated above.** | |

### Time-Bound

Define the timeline for achieving the goal:

| | |
|---|---|
| **What is the target date for achieving this goal?** | |

**Write a goal statement based on the SMART elements above. The goal should be descriptive, yet concise enough that it can be easily communicated and remembered.**

***Example:*** *Increase the number of long-term residents with a vaccination against both influenza and pneumococcal disease documented in their medical record from 61 percent to 90 percent by December 31, 2019.*

**Tip:** It's a good idea to post the written goal somewhere visible and regularly communicate the goal during meetings in order to stay focused and remind caregivers that everyone is working toward the same aim.

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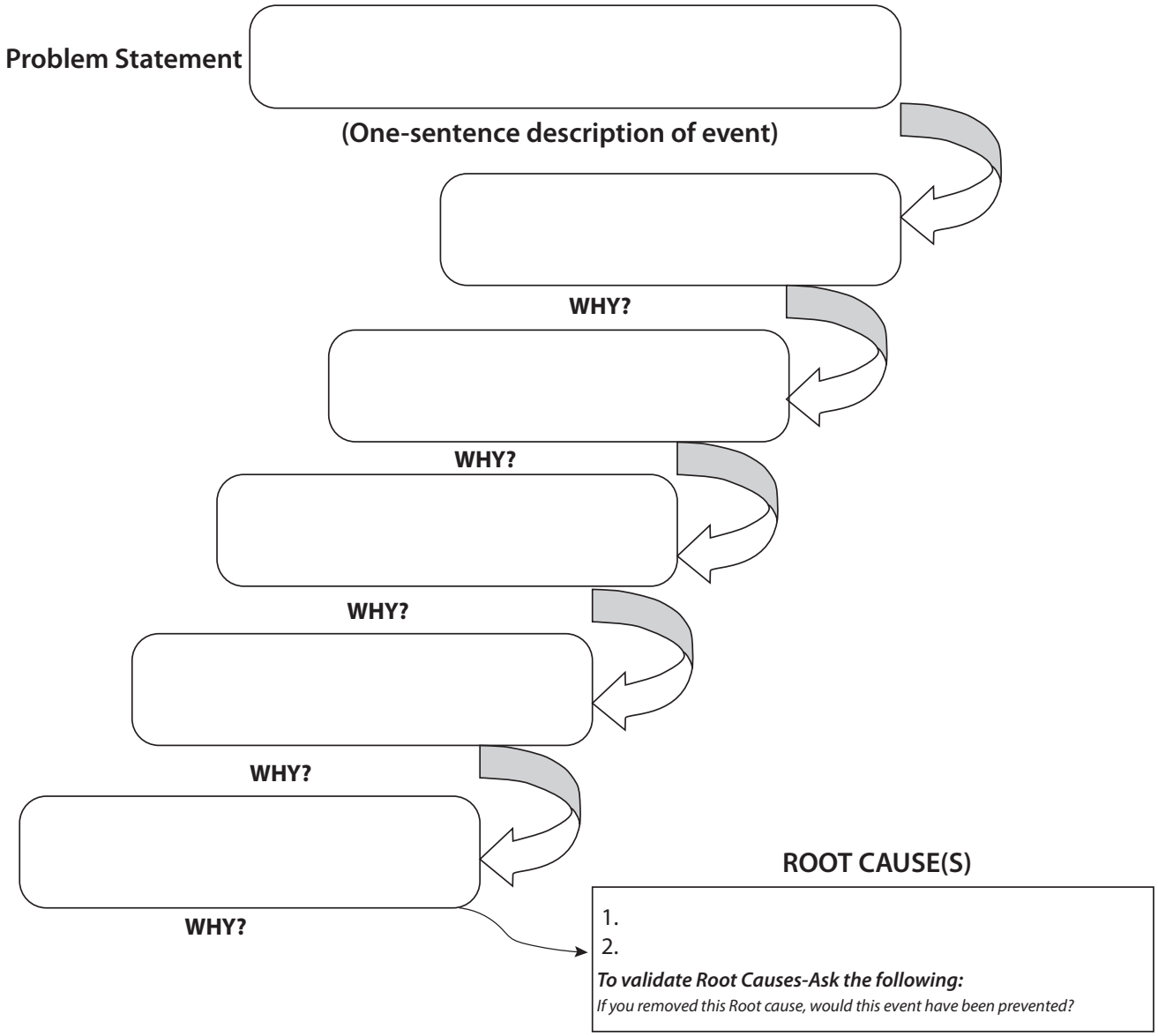
# Step Two (A): Root Cause Analysis and Follow-Up With a Baseline Assessment Checklist

Keep asking "why" until you have identified the real causes to the problem. Get the entire team's input; and remember, there are no wrong answers. You might use one of the following root cause analysis documents from Alliant Quality to accomplish this task.

## This is an essential piece to any Performance Improvement Projects (PIP) because:

- Reviews all of the problem details.
- All staff members are empowered to provide input.
- Focus is on the process not people.
- This tool can be found in our Quality Improvement Workbook found **here**.

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# Step Two (B): Infection Prevention and Control Assessment Tool for Long Term Care Facilities

THE CDC created this tool to assist the assessment of infection control programs and practices in nursing homes and other long term care facilities. If feasible, direct observations of infection control practices are encouraged. Download this Infection Control Assessment and Response Program (ICAR) tool here.

Use this assessment to identify which element(s) should be targeted by your QAPI team to determine which element(s) provides an opportunity for improvement to potentially initiate a targeted PIP.

**Infection Prevention and Control Assessment Tool for Long-term Care Facilities**

This tool is intended to assist in the assessment of infection control programs and practices in nursing homes and other long-term care facilities. If feasible, direct observations of infection control practices are encouraged. To facilitate the assessment, health departments are encouraged to share this tool with facilities in advance of their visit.

**Overview**

**Section 1: Facility Demographics**

**Section 2: Infection Control Program and Infrastructure**

**Section 3: Direct Observation of Facility Practices (optional)**

**Section 4: Infection Control Guidelines and Other Resources**

**Infection Control Domains for Gap Assessment**

I. Infection Control Program and Infrastructure
II. Healthcare Personnel and Resident Safety
III. Surveillance and Disease Reporting
IV. Hand Hygiene
V. Personal Protective Equipment (PPE)
VI. Respiratory/ Cough Etiquette
VII. Antibiotic Stewardship
VIII. Injection safety and Point of Care Testing
IX. Environmental Cleaning



**Section 2: Infection Control Program and Infrastructure**

| I. Infection Control Program and Infrastructure | | |
|---|---|---|
| **Elements to be assessed** | **Assessment** | **Notes/Areas for Improvement** |
| A. The facility has specified a person (e.g., staff, consultant) who is responsible for coordinating the IC program. | ○ Yes ○ No | Click here to enter text. |
| B. The person responsible for coordinating the infection prevention program has received training in IC<br><br>*Examples of training may include: Successful completion of initial and/or recertification exams developed by the Certification Board for Infection Control & Epidemiology; Participation in infection control courses organized by the state or recognized professional societies (e.g., APIC, SHEA).* | ○ Yes ○ No | Click here to enter text. |
| C. The facility has a process for reviewing infection surveillance data and infection prevention activities (e.g., presentation at QA committee). | ○ Yes ○ No | Click here to enter text. |
| D. Written infection control policies and procedures are available and **based on** evidence-based guidelines (e.g., CDC/HICPAC), regulations (F-441), or standards.<br><br>*Note: Policies and procedures should be tailored to the facility and extend beyond OSHA bloodborne pathogen training or the CMS State Operations Manual* | ○ Yes ○ No | Click here to enter text. |
| E. Written infection control policies and procedures are reviewed at least annually or according to state or federal requirements, and updated if appropriate. | ○ Yes ○ No | Click here to enter text. |
| F. The facility has a written plan for emergency preparedness (e.g., pandemic influenza or natural disaster). | ○ Yes ○ No | Click here to enter text. |

| II. Healthcare Personnel and Resident Safety | | |
|---|---|---|
| **Elements to be assessed** | **Assessment** | **Notes/Areas for Improvement** |
| Healthcare Personnel | | |
| A. The facility has work-exclusion policies concerning avoiding contact with residents when personnel have potentially transmissible conditions which do not penalize with loss of wages, benefits, or job status. | ○ Yes ○ No | Click here to enter text. |
| B. The facility educates personnel on prompt reporting of signs/symptoms of a potentially transmissible illness to a supervisor | ○ Yes ○ No | Click here to enter text. |
| C. The facility conducts baseline Tuberculosis (TB) screening for all new personnel | ○ Yes ○ No | Click here to enter text. |



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# Step Three: Action Plan for Improvement With the Plan, Do, Study, Act Model

Document all your action steps to improvement, and make sure to use the Plan, Do, Study, Act (PDSA) methodology for improvement. This worksheet can be downloaded **here**. Sample action plan items include:

## Education

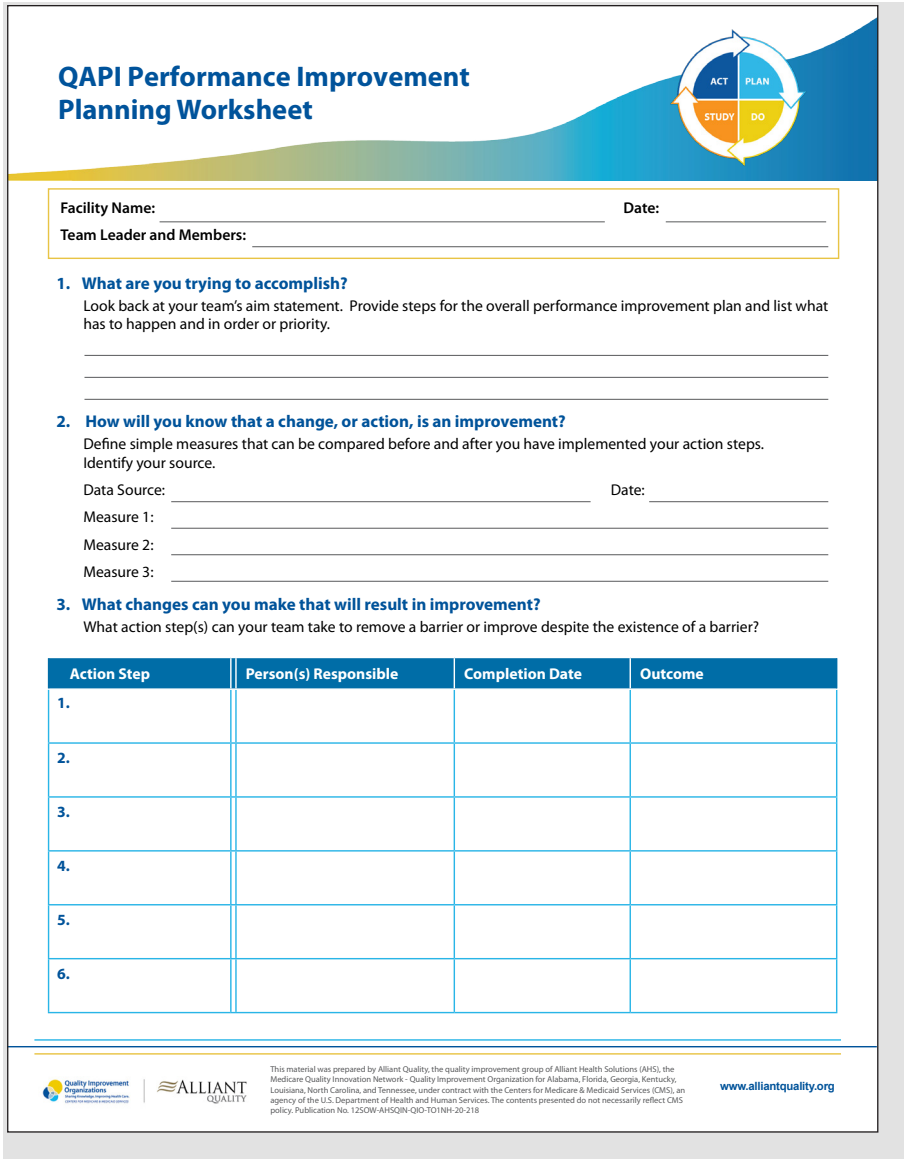
- Educate all staff on their responsibility to prevent infections.
- Educate environmental services on proper cleaning techniques rooted in best practices.
- Conduct competency testing for nurses and nursing assistants for skill checks.
- Conduct competency testing for all staff on proper hand-washing techniques.
- Educate residents, family members, and/or significant others about infection prevention.

## System Changes

- Flow chart communication procedures to ensure there are no gaps.
- Start a pre-shift huddle with staff (all or by each hall) to start each shift.
- Ensure that new employees are oriented to the proper policies and procedures.

## Policy Changes

- Review infection prevention policies and procedures to ensure that they are consistent with best practice guidelines.
- Compare current PPE usage versus recommendations by the CDC and update policy as needed.
- Accurate cohorting for COVID-19.



### QAPI Performance Improvement Planning Worksheet

ACT PLAN STUDY DO

**Facility Name:** _____ **Date:** _____

**Team Leader and Members:** _____

**1. What are you trying to accomplish?**

Look back at your team's aim statement. Provide steps for the overall performance improvement plan and list what has to happen and in order or priority.

_____

_____

_____

**2. How will you know that a change, or action, is an improvement?**

Define simple measures that can be compared before and after you have implemented your action steps. Identify your source.

Data Source: _____ Date: _____

Measure 1: _____

Measure 2: _____

Measure 3: _____

**3. What changes can you make that will result in improvement?**

What action step(s) can your team take to remove a barrier or improve despite the existence of a barrier?

| Action Step | Person(s) Responsible | Completion Date | Outcome |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |

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# Step Four: Monitor and Track Data for Improvement and Sustainability

- Know your data and track it over time to determine if improvement is occurring.
  - Choose quality measures that are capable of tracking improvement.
  - Engage with your Alliant Quality Senior Quality Advisors to develop quality measures and get customized tracking sheets for your project.
- Once improvement goal is met and the project moves to the sustainability phase, monitor data periodically to ensure that improvement goals are holding.

**Nursing Home Name**

**Quality Improvement Initiative - Infection Control Project**

**Weekly Monitoring Tracking Sheet: Hand Hygiene**

**Month: July 2020**

| Week | Staff Initials | Elements in Compliance | Number of Elements in observation (6 for Audit) | Compliance Rate |
|---|---|---|---|---|
| *Example* | *A. B.* | *4* | *6* | *66.7%* |
| | *C. D* | *6* | *6* | *100.0%* |
| One | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| Two | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| Three | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| Four | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| | | | 6 | 0.0% |
| **Monthly Total** | | | | **0.0%** |

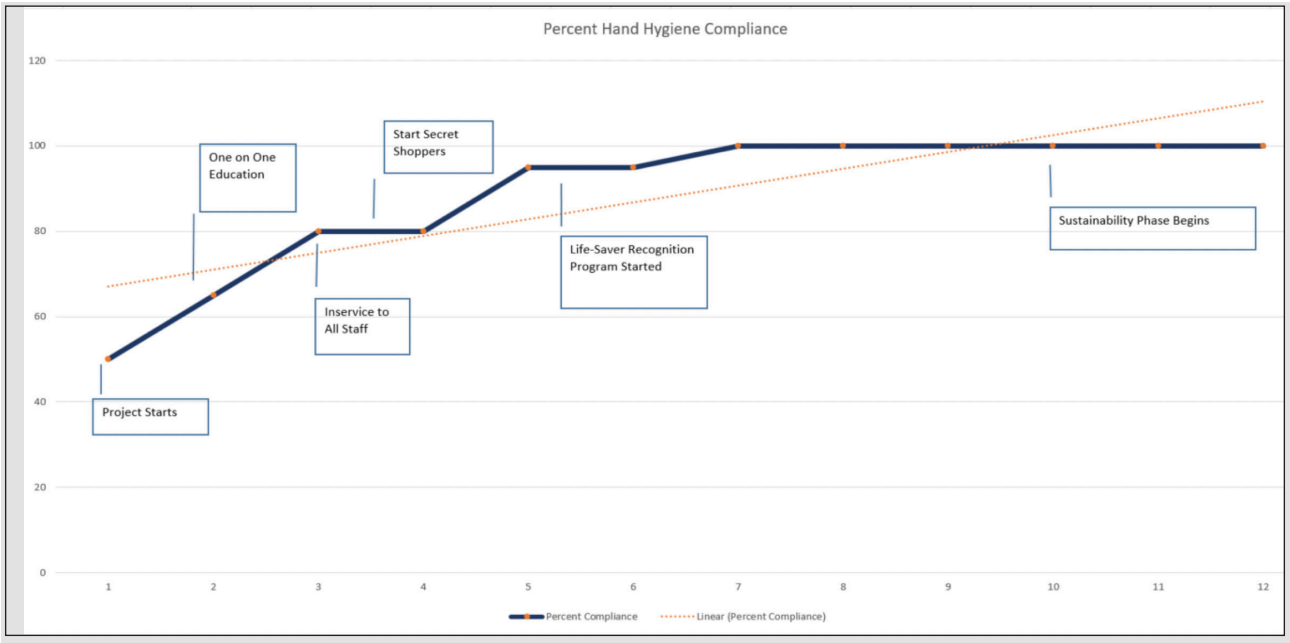
***Observed Weekly Elements Tracked for QII Project:***

*Room Entry*
*Room Exit*
*Before Resident Contact*
*After Resident Contact*
*Before Glove*
*After Glove*

***Quality Measure Indicator:***
***Staff hand hygiene staff compliance with all 6 audit elements***

***Quality Measure Goal:***
***100% Compliance***

***Interventions with Date:***
***1***
***2***
***3***
***4***

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## Using the following principles, you will be able to target areas to improve and achieve sustainability for your Infection Prevention Performance Improvement Project.

- Ground all work in the QAPI process.
- Educate all staff on the improvement steps.
- Assess system processes.
- Perform Root Cause Analysis.
- Set stretch goals for the project.
- Implement Plan-Do-Study-Act Cycles.
- Monitor process change to secure improvement.
- Learn from challenges and celebrate success.

Contact **Julie Kueker**, **Julie.Kueker@allianthealth.org** your Senior Quality Advisor for assistance with reaching your QAPI performance improvement goals.

| Resources | | | |
|---|---|---|---|
| **QAPI at a Glance** | **QAPI Self-Assessment Tool** | **Guide for Developing a QAPI Plan** | **Prioritization Worksheet for PIPs** |
| **Worksheet to create a PIP Charter** | **Measure / Indicator Worksheet** | **Measure/Indicator Collect and Monitor Plan** | |

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