

INPAC Implementation - Quality Improvement

Model for Improvement

Safer Healthcare Now!

What is the Model for Improvement?

- The Model for Improvement is composed of:
 - 3 questions that define the direction, focus and context for the improvement
 1. *What are we trying to accomplish?*
 2. *How will we know that a change is an improvement?*
 3. *What changes can we make that will result in improvement?*
 - **Plan Do Study Act (PDSA) cycles connect planning, action and learning** that results from working through these three questions for an improvement (refer to Safer Healthcare Now! *Improvement Frameworks Getting Started Kit* (SHN) pg.7 for corresponding diagram)
- The Model is designed to be effective in large-scale implementation changes, such as the Integrated Nutrition Pathway for Acute Care (INPAC), which **encourages gradual change and continuous testing** (through PDSA cycles).

Forming Teams: *Who should be involved?*

- A champion with a core support team should lead the implementation of INPAC. The Model for Improvement suggests three types of expertise for this team:
 - **Day-to-day leadership:** front-line staff members involved in the day-to-day processes that are affected by INPAC e.g. dietitians, nurses, foodservice
 - **Technical expertise:** is a subject matter expert that understands key information e.g. site champion, dietitians, IT
 - **System leadership:** hospital management sponsor that can support the team with time and resources and remove barriers within the unit or hospital

Setting Aims: *What are we trying to accomplish?*

- Improvement begins with a clearly defined aim, the implementation of INPAC, and the specific activities within INPAC, such as nutrition screening at admission.
- The implementation team jointly decides on activities, plans and timelines that will be focused on.
- For each activity in INPAC that you are working on implementing, specify goals/ objectives and timelines e.g. by this date, 15 nurses will have tested out the process of screening and referral and be ready to implement screening as part of their admission routine.

- Details on what activity you are attempting, your goals and a timeline should all be recorded.

Establishing Measures: *How will we know that a change is an improvement?*

- Record evaluation measures, which capture changes made on a patient care unit as it moves towards implementing INPAC.
- These include:
 - **Outcome measures:** These measures describe the changes in care that have resulted from implementing INPAC, and how completely INPAC has been implemented. For instance, the INPAC audit captures these outcomes and demonstrates the fidelity of the site to INPAC e.g. proportion of patients screened at risk who are referred to SGA; proportion of SGA-B patients who received Advanced Nutrition Care strategies etc.
 - **Process measures:** These measures describe how the change occurred. For example, a staff knowledge and attitudes at baseline and after the implementation phase can provide valuable information. It is anticipated that improved knowledge and attitudes will lead to improved practices captured in the INPAC audit. Implementation teams can create a variety of process measures as they are implementing a specific activity (e.g. time audit for monitoring food intake).
 - **Balancing measures:** These measures assess other parts of the system to determine whether new problems are being created with the implementation of INPAC and what are barriers to implementation. Discussion groups with staff can be a way to collect this information. Resource utilization tracking (how much time a task is taking, new staff involved etc.) is another means.
- To help implementation teams understand the changes happening within the unit, INPAC audits can be conducted and results discussed with staff on the units.

Developing and Testing Changes: *What changes can we make that will result in improvement?*

The implementation team will meet routinely to identify what and how changes should be made in the unit routine to provide nutrition care in line with INPAC. During their meetings they will review collected data, brainstorm and be creative to consider how to make a specific change they want to implement e.g. how will we monitor food intake for patients? It is important that they also consult with staff members on the unit about what desired changes and ways of implementing could work.

Observing how a process currently occurs (e.g. tray delivery) can be part of this planning. Hosting a discussion group at lunch with staff to get their input is a way to not only let staff know about the initiative, but also solicit ideas. The site implementation team may also informally interview staff, patients and others to more fully understand a process or get ideas on how routines can be changed towards the best practice of INPAC.

Testing a Change: The aim of testing a change is to increase confidence that the change will be an improvement from what is currently done. Testing involves trial and error until a process ‘works’ and is fully implemented. For example, the unit may trial different ways of supporting patient set-up for meals before deciding on the best way to do this activity consistently and in a way that is sustainable. Tests can fail, but implementation should not. PDSA cycles are used to conduct these tests. Refer to

Safer Healthcare Now Fig 2, p.8 for flow chart depicting sequential flow of knowledge in this process.

Implementing a change occurs when the site implementation team believes that they have sufficiently figured out the process with unit staff to carry out a specific INPAC activity. The aim is for the change to become *permanently integrated into the nutrition care processes of the unit*.

PDSA cycles may still be used to manage a change until it is fully implemented. It is important to communicate with those on the unit that have been affected by the change to: understand why they may be resisting a change; to publicize the improved practices and results; and show appreciation for their dedication to improving nutrition care for patients. For example, provide positive feedback when staff is observed making the change and celebrate achievement of milestones.

In the implementation step for the change, it is also important to design the system around the activity so that it is to complete and difficult for staff to return to former routines.

Sustaining a change after implementation requires purposeful activities. The goal is to prevent unit staff from returning to old practices. These sustainability activities usually involve:

- Monitoring outcomes (e.g. the INPAC audit will monitor key activities)
- Integrating the change into daily processes (e.g. talking about screening or INPAC food intake monitoring at staff rounds)
- Changing job descriptions or unit/hospital policies
- Assign responsibility for monitoring sustained activities to a leader in that staff group e.g. senior diet technician or dietitian monitors unit and diet technicians process with respect to INPAC food monitoring

Spreading Success: Once INPAC is implemented and sustained in one unit, spreading this improved practice to other units in the hospital is the ultimate goal. Success within individual units will lead to spread throughout the organization. Key to promoting spread is to highlight that:

- The team has tested, implemented and sustained the INPAC on the test unit.
- Senior management desire spread beyond the single unit. The evidence from the More-2-Eat study can support decision making for these leaders.
- The improvement of nutrition care is important in the hospital because quality improvement of nutrition is a priority beyond the test unit.
- A senior leader is assigned accountability to spread INPAC to other units.

Refer to table on *Safer Healthcare Now* p.33 for common mistakes when spreading changes and strategies to overcome these barriers.

The Model for Improvement helps to develop, implement and sustain a quality practice, such as the INPAC, to promote patient safety and care.