

# Quality Improvement Fundamentals: An Introduction to the Jump-Start Curriculum

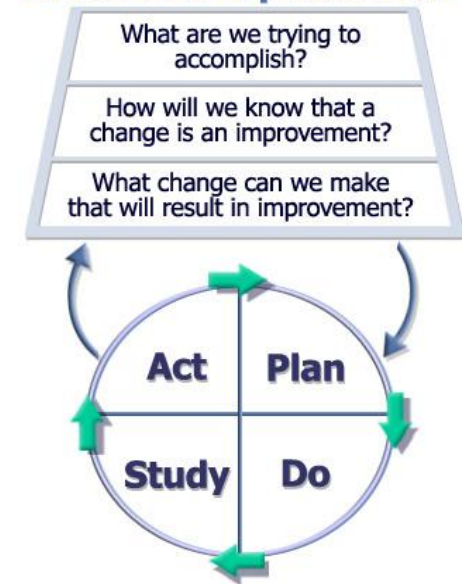
## Team Worksheet

Team Name: \_\_\_\_\_

### 1. Improvement Project Aim Statement

- What is expected to happen
- The system to be improved
- The setting or (sub-)population of patients
- Specific numerical goals
- Time frame
- Guidance for activities, such as strategies for the effort, or limitations and boundaries

### Model for Improvement





3. **Proposed Changes to Accomplish Aim** (see example at end of document)

<b>Key Change</b>	<b>Team members/site(s) involved in testing this change</b>

## Examples of Measures and Changes

<b>Type</b> (Outcome, Process, or Balancing)	<b>Name of Measure</b>	<b>Definition</b> (include numerator and denominator as indicated)	<b>Data Collection Strategy</b>
Process	Self-management goals	Percent of (asthma) patients with self management goals documented in the last 12 months <b>Num:</b> Number of patients with self-management goals documented in the past 12 months <b>Den:</b> All patients in the registry	<b>(Source: registry)</b> On the last day of each month, query registry for all (asthma) patients with documented self-management goals in past 12 months
Process	Self-management goals	Percent of (asthma) patients with self management goals seen in the last month with self management goals documented n the last year. <b>Num:</b> Number of patients with self management goals documented in the last year <b>Den:</b> (15) The first 15 patients with asthma seen in the last month.	<b>(Source: chart review)</b> On the last day of each month, pull the first 15 charts of asthma patients seen that month. Review records and record the number with self management goals documented within the last year.

<b>Key Change</b>	<b>Team members/site(s) involved in testing this change</b>
Identify Primary Language before a new patient visit	Receptionist
Use standard flow sheet during patient visits	Providers

# **Asthma Change Package (Organized by Care Model)**

## **Decision Support:**

- Use NHBLI guidelines to establish a clear diagnosis for all people with asthma
- Employ severity classification at planned visit intervals based on symptom frequency and pulmonary function
- Use structured encounter form with embedded guideline elements to guide decision making among known asthma patients
- Maintain practice-wide guidelines for specialty referral for poorly controlled, complicated, or confusing patients
- Identify and manage predisposing factors (environmental triggers, co-morbidities)
- Develop a refill protocol to identify patients who are overusing beta agonists

## **Delivery System Design**

- Asthma provider champion, nurse champion, and care team identified and well organized
- Define roles and delegate tasks to optimize staff efficiency (e.g.. train office staff to assist clinicians in maintaining written management plan)
- Use planned care visits determined by severity of illness and agreed upon by care team and patient/family
- Create a system to identify and vaccinate all patients with asthma for influenza

## **Clinical Information Systems**

- Maintain registry of asthma patients updated with encounter form, patients' asthma severity, follow-up, race, ethnicity and language preference
- Track asthma care quality measures and generate planned visit prompting list via registry and encounter data including proactive care (e.g. influenza vaccines, seasonal interventions)
- Conduct monthly identification of poorly controlled asthma patients via billing data (hospitalizations, ED visits, and if available, med use)
- Use a registry or billing data to monitor for patients who do not show for planned asthma visits and assign staff to follow-up

## **Family and Self Management Support:**

- Create care plan with patients and families that provides strategies for optimal asthma management in all three zones (red, yellow, green)
- Emphasize and educate the patient and family about their role in management of asthma
- Collaborate with patient and family to set and document shared management goals

## **Health Care Organization**

- Maintain a well-functioning linkage to Health Plan leadership
- Organizational leadership establishes and monitors goals of asthma program
- Assess organizational and individual understanding of culturally and linguistically effective care
- Provide culturally and linguistically appropriate care at all points of contact
- Embed measurement and monitoring in work flow

## **Community Resources**

- Identify and utilize community resources (e.g. specialists, smoking cessation programs)
- Partner with schools, workplaces and other community organizations to encourage optimal management in all patient settings

# Example of a PDSA Cycle

**Objectives for this PDSA Cycle:** *Develop a process for establishing self-management goals*

QUESTIONS: Will the form “My Action Plan” help patients set a goal? Will Cindy (NP) have time during the visit to use with patient?

## **PLAN:**

PLAN FOR CHANGE OR TEST: WHO, WHAT, WHEN, WHERE

Cindy will use the form “My Action Plan” with one patient by November 5.

Plan for Data Collection:

Cindy will use this form with the patient and ask questions, while waiting for the provider to enter the exam room.

Cindy will record the time it took to complete and use the form

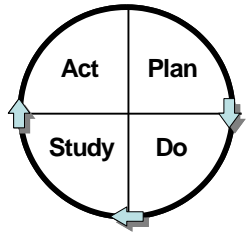
.Team will meet November 8 to discuss results

PREDICITONS: Patients will find the action plan form easy to use and helpful. It will not take too much visit time.

**DO:** CARRY OUT THE CHANGE OR TEST; COLLECT DATA AND FEEDBACK. DESCRIBE WHAT HAPPENED INCLUDE REPORTING OF ANY UNEXPECTED EVENTS. BEGIN ANALYSIS. Cindy was able to meet with one patient. The patient found the form easy to use. Cindy and the patient were able to complete the form in 7 minutes.

**STUDY:** COMPLETE ANALYSIS OF DATA; SUMMARIZE WHAT WAS LEARNED. The form worked well, was easy to use in even less time than we thought. Patient like the process. Realize that we now need a process to document the goal and a way to follow up with patient. Recommend for patients who set goals, that we add a section at the bottom of the form to know how to reach patient (phone, email?) and what time and day is best. We also thought it would be a good idea to make a copy of the form for the patient to take home.

**ACT:** ARE WE READY TO MAKE A CHANGE? PLAN FOR NEXT CYCLE. Will alter form to include follow up plan and Cindy will retest on more patients on the week of November 10. Will include different ages and cultures. Need to begin 2 additional PDSA cycles – one for documenting goals in registry and one for follow-up after setting goals.



**MODEL FOR IMPROVEMENT**    Cycle # \_\_\_\_ **DATE** \_\_\_\_\_

Change or Idea evaluated \_\_\_\_\_

Objective for this PDSA Cycle

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What question(s) do we want to answer with this PDSA cycle?

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**Plan:**

**Plan to answer questions** (test the change or evaluate the idea): *What, Who, When, Where*

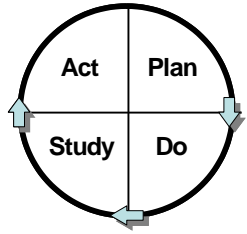
**Plan for collection of data** needed to answer questions: *What, Who, When, Where*

**Predictions** (For each question listed above, what will happen when plan is carried out? Discuss theories):

**Do:** *Carry out the plan; document problems and unexpected observations; collect data and begin analysis.*

**Study:** *Complete analysis of data; what were the answers to the questions in the plan (compare to predictions)? Summarize what was learned.*

**Act:** *What changes are to be made? Plan for the next cycle.*



**MODEL FOR IMPROVEMENT** Cycle # \_\_\_\_ **DATE** \_\_\_\_\_

Change or Idea evaluated \_\_\_\_\_

Objective for this PDSA Cycle \_\_\_\_\_

What question(s) do we want to answer with this PDSA cycle?

Plan:

**Plan to answer questions** (test the change or evaluate the idea): *What, Who, When, Where*

**Plan for collection of data** needed to answer questions: *What, Who, When, Where*

**Predictions** (For each question listed above, what will happen when plan is carried out? Discuss theories):

**Do:** *Carry out the plan; document problems and unexpected observations; collect data and begin analysis.*

**Study:** *Complete analysis of data; what were the answers to the questions in the plan (compare to predictions)? Summarize what was learned.*

**Act:** *What changes are to be made? Plan for the next cycle.*



# Complete List of Change Concepts

## A. Eliminate waste

1. Eliminate things that are not used
2. Eliminate multiple entry
3. Reduce or eliminate overkill
4. Reduce controls on the system
5. Reduce or reuse
6. Use substitution
7. Reduce classification
8. Remove intermediaries
9. Match the amount to the need
10. Use sampling
11. Change targets or set points

## B. Improve work flow

12. Synchronize
13. Schedule into multiple Processes
14. Minimize handoffs
15. Move steps in the process close together
16. Find and remove bottlenecks
17. Use automation
18. Smooth work flow
19. Do tasks in parallel
20. Consider people as in the same system
21. Use multiple processing units
22. Adjust to peak demand

## C. Optimize Inventory

23. Match inventory to predicted demand
24. Use pull systems
25. Reduce choice of features
26. Reduce multiple brands of same item

## D. Change the Work Environment

27. Give people access to information
28. Use proper measurements
29. Take care of basics
30. Reduce demotivating aspects of pay system
31. Conduct training
32. Implement cross-training
33. Invest more resources in improvement
34. Focus on core processes and purpose
35. Share risks
36. Emphasize natural and logical consequences

37. Develop alliance/cooperative relationship

## E. Enhance the Producer/Customer Relationship

38. Listen to customers
39. Coach customers to use product/service
40. Focus on the outcome to a customer
41. Use a coordinator
42. Reach agreement on expectations
43. Outsource for "free"
44. Optimize level of inspection
45. Work with suppliers

## F. Manage Time

46. Reduce setup or startup time
47. Set up timing to use discounts
48. Optimize maintenance
49. Extend specialist's time
50. Reduce wait time

## G. Manage Variation

51. Standardization (create a formal process)
52. Stop tampering
53. Develop operational definitions
54. Improve predictions
55. Develop contingency plans
56. Sort product into grades
57. Desensitize
58. Exploit variation

## H. Design Systems to Avoid Mistakes

59. Use reminders
60. Use differentiation
61. Use constraints
62. Use Affordances

## I. Focus on the Product or Service

63. Mass customize
64. Offer product/service anytime
65. Offer product/service anyplace
66. Emphasize intangibles
67. Influence or take advantage of fashion trends
68. Reduce the number of components
69. Disguise defects or problems
70. Differentiate product using quality dimensions