

## Catalog of PDSA Examples

*Aim of this catalog:* To give you examples that you can study and compare to the PDSA cycles you carry out.

We have concentrated on a collection of PDSA cycles that are relatively small in focus and time span, to emphasize the importance of small, rapid tests of change. Many of these examples come from early team experiences using the Model for Improvement. All of the examples are real. The variation in format of documentation reflects different formats used by teams over the past three years. The form on the last page of the catalog contains the questions we recommend you answer.

Each of the detailed examples in our catalog meets the basic requirements for a PDSA cycle:

- The activity was planned, including a plan for collecting data.
- The plan was attempted
- Time was set aside to analyze the data and study the results
- Action was rationally based on what was learned.

### More on the PDSA Cycle

An excellent cycle will have answers to **all** the questions in the detailed planning form (in the Appendix.). In particular, we would like to stress the importance of a prediction as a key ingredient in your planning. An explicit prediction increases the likelihood that you will really learn from your cycle—either from the success of a prediction that matches actual outcomes or from your ‘failure’ to predict correctly.

We also give a couple of examples of abbreviated cycles that do not show all the details of the PLAN step.

### Benefits of documentation

Excellent documentation will provide answers to all the questions listed on the planning form on the last page. We recognize there is a difference between the **documentation** of a PDSA cycle and the **carrying out** of a PDSA cycle. In our own work with the Model for Improvement, we know we are tempted to skip or at least skimp on the documentation. Nonetheless, written documentation of PDSA cycles has real benefits that you need to weigh against the effort needed to document your work. Some of the benefits include:

1. When you work in a team, written documentation of a PDSA cycle helps keep a team aligned, with a common purpose.
2. A written plan (who, what, when, where) gives you a chance to give a common message to people affected by the change.
3. A written prediction in the PLAN step provides a strong stimulus to learning.
4. The lessons captured in written documentation of STUDY and ACT become public, common knowledge for the team and this knowledge allows new team members and participants in spread get up to speed.

You need not type up every cycle—neatly written hand notes stored in a 3-ring binder provide most of the team benefit (except for archiving or back-up!)

### **Senior Leader Report Examples**

At the end of most of the examples, you will see a text box. In this text box is a summary version of the PDSA cycle, a short version of the longer documentation.

In your monthly Senior Leader reports, you will be asked to give a brief summary of your test cycles. A three-sentence summary can provide your senior leaders, other members of your health center, cluster staff and faculty with meaningful information about your work. Each short example gives answers to three questions:

1. What did you do? Include some description of the scope of the test—number of patients or providers involved, length of time you ran the test.
2. What did you learn?
3. Based on what you learned, what will you do next?

### **How you might use this catalog**

We have labeled most of the cycles with the component of the Care Model addressed by the documentation. Particularly at the beginning of your work with the Care Model, if you are developing a test of change in a particular component, you might start with a look at the example(s) in that component to help you create your plans.

You can make your own version of the catalog. Add some examples from your health center. Then you can use the catalog as a reference guide to help your colleagues learn about the Model for Improvement. People often find it easier to relate to examples from a familiar setting, so show them what a test cycle or two look like in their own health center.

### **Contents of the catalog:**

Example 1: Self-Management: Development of a Self-Management form, Part 1 .....	3
Example 2: Self-Management Development of a Self-Management Form, Part 2 .....	5
Example 3: Decision Support: Development of Assessment Form.....	7
Example 4: Decision Support: Use of Screening Tool (test of change involves a PATIENT and a PROVIDER) .....	9
Example 5: Decision Support: Use of Screening Tool (test of change involves provider only) .....	11
Example 6: Organization of Health Care: Orienting New Clinicians to the Collaborative .....	13
Example 7: CIS: Adapting local registry to meet collaborative requirements .....	15
Example 8: Delivery System Design: Test of a clinic involving two languages.....	16
Example 9: Community—A cycle of tests of a brochure .....	17
Example 10: An implementation (“permanent change”) that was not intentionally tested on a small scale .....	18
Example 11: CIS: testing a way to flow data into PECS .....	19
PDSA form (blank)	21

## Example 1: Self-Management: Development of a Self-Management form, Part 1

Date: 07/19/02

**PURPOSE OF CYCLE:** To choose a patient self-management goal sheet for tracking and inclusion into our chart.

### PLAN:

#### *THE CHANGE:*

**What are we testing?** Our intent is to test two different patient self-management goal sheets to determine which is the more functional. One of these forms is a check off form with the ten (10) top goals listed, while the other requires the patient to actually choose and write down their own goals.

**Who are we testing the change on?** We are going to initially test these on one patient each at their next visit.

**When are we testing?** The next two patient visits which will occur the week of 7/15/02.

**Where are we testing?** The test will be conducted at our FX facility.

#### *PREDICTION:*

**What do we expect to happen?** We expect to be able to determine which form our clinical champion, nurse and patients prefer to use to set patient self-management goals.

#### *DATA:*

**What data do we need to collect?** Subjective findings from the provider and nurse stating which form they prefer to use as well as discussion with patients who are filling out the form.

**Who will collect the data?** Clinical champion.

**When will the data be collected?** Immediately after the second patient visit the provider and nurse will discuss the two different forms and give their conclusions.

**Where will the data be collected?** The provider and nurse will make the decision at the FX facility after reviewing the forms.

### DO:

**What was actually tested?** We tested two different forms. We got the forms from the internet site [www.A1cnw.net](http://www.A1cnw.net).

**What happened?** We employed the forms with the first two diabetic patients that we saw. We had them fill out both forms and then asked them which they preferred. Both patients chose the same form.

**Observations?** As it turned out both patients chose the same form that our clinical champion and nurse preferred. The general consensus was that the form which required them to simply check off their goals was preferable to the one which actually made them write them down.

**Problems?** No real problems were encountered other than some mild patient resistance to the idea of having to fill out another piece of paper, however, this was quickly alleviated with the explanation of the concept of self-management.

**STUDY:**

**Complete analysis of data, summarize what was LEARNED, compare data to predictions**

Our initial feeling was that the patients would prefer a form which did not require them to write a lot of information down. Rather we felt that they would prefer to have a form which would allow them to simply check off their goals. We found that they actually preferred a combination of the two forms. One which both allowed them to check off goals or write down anything not listed that they felt was important.

**ACT:**

**What changes should we make before the next cycle?** We will be changing the form to allow space for those patients who do want to write in a goal to be able to do so.

**What will the next test be?** We will be utilizing the selected form with the next five (5) diabetic patients from our registry.

---

**End of Example 1**

*Senior Leader report:* We tested two different self-management goal sheets with two patients. We learned that we should combine features from the two sheets; patients were interested in self-management approach. We will revise the form and test on the next five patients.

## Example 2: Self-Management Development of a Self-Management Form, Part 2

Date: 7/25/02 Cycle 2

**PURPOSE OF CYCLE:** To further test our choice of a diabetes self-management form and select the one we will continue to use.

### PLAN:

#### *THE CHANGE:*

**What are we testing?** We had previously tested two diabetes self-management forms on two (2) patients and chose the one which our clinical champion, nurse and patients all preferred. We then made changes to the form based upon patient input by adding space for them to write down their own goals if they so chose. We are now testing this new form.

**Who are we testing the change on?** We are testing this form on the next five (5) diabetic patients we see.

**When are we testing?** We will be testing during the week of 7/22/02 – 7/26/02 on the first five (5) diabetic patients seen.

**Where are we testing?** Testing is being conducted at the FX facility.

#### *PREDICTION:*

**What do we expect to happen?** We expect to choose the final form of our patient diabetes self-management goal setting form.

#### *DATA:*

**What data do we need to collect?** The observations of patients, provider and nursing staff about whether the patients perceived the forms to be useful as well as how they felt about taking the time to go over them and fill them out.

**Who will collect the data?** Our provider champion and the nursing member of the team.

**When will the data be collected?** Immediately following each patient visit the provider and the nurse will discuss the patient reaction to the form.

**Where will the data be collected?** At our FX facility.

### DO:

**What was actually tested?** A refinement of a previously tested diabetes patient self-management goal setting form.

**What happened?** Each patient (5 total) was given a form to set goals for the self-management of their disease. The idea of self-management was explained to them and they were asked to fill out the form setting goals for their active participation in their care. The forms were then

signed by both the patient and provider. The original was placed in the patient's chart and they were given a copy to take with them.

**Observations?** Patients seemed to react positively to the idea of setting goals particularly when the idea of patient self-management was explained to them. They readily filled out the forms and actively participated in the self-management discussions.

**Problems?** No real problems were encountered during this test.

## **STUDY:**

**Complete analysis of data, summarize what was LEARNED, compare data to predictions**

We found that patients were very receptive to the idea of self-management goal setting after the concept was explained to them. They would actively participate in discussions about various goals and would try to set realistic goals for themselves. Our initial feeling when we started the process is that patients might be somewhat resistant to filling out another form, however, this was not the case.

## **ACT:**

**What changes should we make before the next cycle?** No further changes to the form are anticipated in the immediate future. The next step will involve how the information will be placed in the chart so as to be useful and readily reviewed.

**What will the next test be?** The next test will involve integration of this form into the patient medical record. A decision will be made as to exactly where in the chart the form should be kept.

---

## **End of Example 2**

*Senior Leader report:* We tested a revised self-management goal form with five patients. All five patients understood the form and reacted positively to the self-management approach. We will next test how to integrate information from the form into patient charts.

### **Example 3: Decision Support: Development of Assessment Form August 21, 2001**

**PDSA Cycle 1:** Finding an asthma assessment form for our providers.

#### **Objective:**

Our objective is to find an asthma assessment flow sheet to use for assessing our asthma patients. We are looking for a form that is easy to follow, is inclusive of all selected measures, and that will provide medical staff with pertinent medical information when assessing asthma patients.

#### **PLAN:**

##### **Questions:**

Is the Hill Health Center asthma assessment form appropriate to use in our health center?

##### **Predictions:**

We may need to modify the form, as it looks too crowded and cumbersome.

##### **Plan for change or test:**

Any asthma patient seen by our pilot team on Monday 8/20/01 or Tuesday 8/21/01 will be assessed using the Hill Health Center form. The provider assessing the patient will then provide feedback about the form used. Although our collaborative is initially based in the school based health centers, our test will be done at the main clinic site, as school is not yet in session.

##### **Plan for collection of data:**

The provider using the assessment form will evaluate the form and will record their thoughts and suggestions. Team members will then consider all comments.

#### **DO:**

On 8/21/01 M., a nurse case manager and team member used the Hill Health Center form to evaluate an asthma patient. She documented her concerns and suggestions with the form.

#### **STUDY:**

This form will need to be revised for future use with our patients. Comments about the form included the following:

1. Vital signs and lung function tests section of the form could be replaced by the vital sign stamp that is already part of the charting system used by our health center.
2. The form does not provide enough space for notes or questions.
3. Some questions seem too specific while others lack direction, ex. Current Medication section does not ask about specific types of medications being used (i.e. steroids), does not have enough space, and does not address other medications that the patient may be taking concurrently.

4. It would be helpful if the form had a section to address any active issues since last visit, as well as including the date of last visit.
5. The treatment at visit section could be modified by deleting the current information and having the provider simply fill in what treatment, if any, was provided.

**ACT:**

We have determined that the Hill Health Center form tested will not meet the needs of our providers. All team members have been provided with the comments and suggestions made about the form, and have been charged with redesigning the current form. At our meeting next week we will select one of the revised forms to run a new PDSA cycle on in an effort to find the most convenient form for all providers.

---

***End of Example 3***

*Senior Leader Report:* We tested an assessment form from Hill Health Center on one patient seen 8/21. We need to change the format to allow more room for notes and to add information requested by our providers. We will redesign the form and test it again the week of 8/27.

**Example 4: Decision Support: Use of Screening Tool (test of change involves a PATIENT and a PROVIDER)**

**July 2002**

PURPOSE OF CYCLE: Trial use of PHQ-9 form

**PLAN:**

*THE CHANGE:*

Try the PHQ-9 depression screening tool.

**What are we testing?** New tool, not used at XHC

**Who are we testing the change on?** Pt. presented for mental health counseling

**When are we testing?** July 2002

**Where are we testing?** XHC, Dept. of Social Services

*PREDICTION:*

**What do we expect to happen?** Patient respond appropriately to PHQ-9, interviewer score results

*DATA:*

**What data do we need to collect?** Try tool with new patient

**Who will collect the data?** R., MSW

**When will the data be collected?** July 2002

**Where will the data be collected?** Social Services

**DO:**

**What was actually tested?** Patient screened for depression using translation (Spanish) of the PHQ-9 downloaded from the BPCH website

**What happened?** Patient and counselor were able to answer some questions appropriately during interview. However, some flaws in translation, confusing both patient and counselor. Counselor had to get English translation in order to understand concept and reword interview question in Spanish. (E.G. frequency column reads: “mas de medio dia” (more than half a day), when it should actually read “more than half of the days” (mas de la mitad de los dias) .

**Observations?** Translation would have to be refined before using with another patient.

**Problems?** No.

**STUDY:**

**Complete analysis of data, summarize what was LEARNED, compare data to predictions**

Translation reviewed by two bilingual mental health counselors; determined that new translation would need to be done.

**ACT:**

**What changes should we make before the next cycle?** Improve translation.

**What will the next test be?** Last week in July

Mental health therapists refined translation, used with another patient and submitted to the collaborative.

---

*End of Example 4*

*Senior Leader Report: We tested a Spanish version of PHQ tool on one patient on 20 July. We identified several translation errors when we compared the form to the English language version. We repaired the translation and tested with 1 patient on 27 July.*

**Example 5: Decision Support: Use of Screening Tool (test of change involves provider only)  
July 2002**

**Purpose of Cycle:** Train medical providers to administer PHQ-9

**PLAN**

**What are we testing?** Use of the PHQ-9

**Who are we testing the change on?** K.K., MD & M.S., CRNP

**When are we testing?** 7/22/02 to 7/25/02

**Where are we testing?** CS and PV clinics

**Prediction:**

**What do we expect to happen?** Screening tool will be easy to administer and score.

**Data:**

**What data do we need to collect?** Feedback from medical providers

**Who will collect the data?** T. G. , Ph.D (responsible for training) and Team.

**When will the data be collected?** 7/25/02 Team meeting

**Where will the data be collected?** 2<sup>nd</sup> floor conference room

**DO**

**What was actually tested?** Administering and scoring PHQ

**What happened?** Providers quickly became proficient in using the PHQ.

**Observations?** For one provider, review of several completed PHQs facilitated understanding of scoring.

**Problems?** One provider requested additional review of scoring for accuracy.

**STUDY Analysis of Data, Summary of what was learned, compare data with predictions**

Learning to use the PHQ was easy. One provider requested additional training, which took less than 5 minutes. Giving the PHQ raised several questions for providers about

- 1) Indicating time frame of any given PHQ (initial, 6 week, 6 month); and
- 2) Indicating disposition.

The Team thought revising the PHQ (not screening item content) would improve documentation and improve accuracy of populating registry.

## ACT

### **What changes should we make before the next cycle?**

- 1) Provider training will be scheduled with T.G., PH.D. when questions arise.
- 2) T.G., Ph.D. will train L. S., CRNP on August 5<sup>th</sup> at PV Clinic
- 3) PHQ will be revised to include
  - a) 2 more patient identifiers (chart requirement for JCAHO)
  - b) a space to indicate where in time cycle PHQ was administered; and
  - c) a space for the provider's to indicate disposition.

**What will the next test be?** Use of the revised PHQ.

---

*End of Example 5*

*Senior Leader Report* We tested use of PHQ by two providers. One provider raised several questions; the other requested a review by T.G. of scores. We revised the format to allow space for notes and patient identifiers (per JCAHO.) Revised form will be used by LS at PV clinic after she gets trained.

## **Example 6: Organization of Health Care: Orienting New Clinicians to the Collaborative**

PDSA Cycle #24

Orienting New Clinicians to the Collaborative

August 3, 2000

### **PLAN:**

To develop an orientation format for training clinicians who will be newly joining the collaborative. To test this orientation format on 1-2 clinicians and make modifications as needed.

### **DO:**

The orientation format was developed and tested on one new clinician, and one clinician who has worked with the collaborative team, but is not a full member of the team.

### **STUDY:**

The orientation format we developed was very thorough and a useful tool to guide the orientation. It seems to require 1 to 1.5 hours to complete.

By testing the format, several issues were raised. First, it would be helpful to create an "orientation packet" which includes samples of all of our forms, a brief introductory fact sheet explaining what the collaborative will do for the clinician and her patient, a "cheat sheet" for the use of the undefined registry parameters we have agreed on, and a one page sheet outlining the goals of our Diabetes Team. In addition, the team would like to create a laminated handout for quick reference, which describes the timing of various labs, screening, and specialty referrals (for example, annual eye exam, quarterly HgbA1c measurements, etc.).

The Team found that reviewing the goals our Diabetes Team had set at the beginning of the collaborative was helpful to the Team member, as well as to the clinician being oriented.

Another issue that surfaced is the need to develop more standardized systems for referrals to the various services created by the Diabetes Team such as the Breakfast Club, the Walking Club, and the Promotora Program. Our informal systems have worked fine with our small group, but doing the orientation highlighted the need for more clear descriptions of these services and clear ways clinicians can access these services for their patients.

**ACT:**

The Team plans to create an orientation packet, with the components described above. We will also work on systems for accessing our new services. Finally, the team will plan to review all our goals and objectives monthly when the monthly report is submitted. This will help us track our progress as a group, and will help us focus on the areas where we are lagging.

---

*End of Example 6*

*Senior Leader Report:* We tested an orientation to the collaborative with 2 providers. We identified several issues to address, including the need to have reference sheets and tools for the providers, as well as the need to formalize our referral methods at the clinic. We will next make the changes in forms and we plan a monthly review by the team of goals and objectives, to keep us focused.

**Example 7: CIS: Adapting local registry to meet collaborative requirements**  
**PDSA WORKSHEET Model For Improvement Cycle:\_\_\_1 Clinical information System**  
**Date;\_\_\_18 August 2001**

	<p><b>CYCLE FOR LEARNING AND IMPROVEMENT</b>  <b>Objective: Modify Registry to include all performance indicators and assure access to all providers and team members involved.</b></p>
<p><b>PLAN:</b>  <b>Questions:</b> Will we be able to allow access through our network easily? What indicators must be added to present registry and can present registry be updated  <b>Predictions:</b> present registry will be updated and available to all team members through network.  <b>Plan for change or test: who, what, when, where.</b> Team will review registry in present format and identify additions required. D. will enter items identified by 8/21/01. Dr. L and DA will work on providing access to team through network by 8/21/01  <b>Plan for collection of data: who, what, when, where</b>  August 21 at 12pm a team meeting will be held to identify any problems to completion by target of 3PM on that day.</p>	
<p><b>DO: carry out the change or test; collect data and begin analysis.</b>  Registry reviewed and only minor field to be added. D has completed revisions on ACCESS. Registry has been placed on network server.</p>	
<p><b>STUDY: complete analysis of data; summarize what is learned. Record results on graphs, with annotation of run chart with your change.</b>  Original objective completed. Issues arise of confidentiality of data arise. Access by all team raises possibility of accidental corruption of data.</p>	
<p><b>ACT: are we ready to make a change (as implementation)? Plan for the next cycle.</b>  Identify ways in which we can assure both accessibility to the data while assuring accuracy and privileged nature of information.</p>	

*Senior Leader Report: We tested how to use the clinic information network to give team members access to the registry tool, on 8/21. We uncovered issues of confidentiality and risks to data integrity. We will revise access levels and identify ways to prevent data corruption.*

End of Example 7

## **Example 8: Delivery System Design: Test of a clinic involving two languages**

### **PDSA for June 2001      Delivery System Design**

#### ***PLAN:***

Because we have a large number of Spanish-speaking patients who have not been to a clinic, we decided to test a clinic with 6 Spanish-speaking patients and 4 English-speaking (normally we book 12 patients). Block out the schedules of 2 Spanish-speaking outreach workers to serve as translators. The prediction was that due to the translation services, the visits would take longer and patient flow would be harder to control.

#### **DO:**

During the June 27th clinic, 10 patients were scheduled. There was one cancellation, 2 no shows and we served only 7 clients. The clinic ended about 1 hour early.

#### **STUDY:**

The no shows and cancellation decreased the number of patients, but the translation did not slow patient flow as we had anticipated. We are fortunate to have bilingual staff for dental, foot care and nursing. We also had an NP fill-in as the dietician and she too is bi-lingual (the regular dietician was ill and she normally takes the most time with patients). The outreach worker was used only once to translate for the medical provider.

#### **ACT:**

Schedule the July 10th clinic in the same manner with only one outreach worker reserved. It is anticipated that with the regular dietician needing translation, we should not increase our bookings with Spanish-only patients.

---

#### **End of Example 8**

We tested a clinic day 27 June with Spanish speakers (6 patients) and English speakers (4 patients) mixed together. We learned that translation didn't increase time and our bilingual staff could handle the mix. We will run the July 10<sup>th</sup> clinic with one outreach worker but won't increase number of Spanish-only patients.

## **Example 9: Community—A cycle of tests of a brochure**

### **10-5-01**

**P:** Need to have a brochure to inform patients and the community about the collaborative.

**D:** Team members were charged with the task of putting a form together for distribution.

**S:** Forms reviewed at team meeting and suggestions were gathered.

**A:** Suggestions were accepted and forms were changed accordingly. Brochure was distributed to the schools.

### **10-10-01**

**P:** To test the brochure in a pediatric patient.

**D:** Asked student to read brochure, and then explain to NP what the program was about.

**S:** Student was able to read and understand the brochure. Student was then able to explain what he learned from the brochure.

**A:** Keep the brochure as is since student was able to understand it.

### **10-12-01**

**P:** To test the brochure with the department of public health.

**D:** Department of public health was asked to review the brochure for accuracy and clarity.

**S:** DPH comments were positive.

**A:** Will keep the brochure as is as the DPH recommended no changes.

---

**End of Example 9**

**Example 10: An implementation (“permanent change”) that was not intentionally tested on a small scale**

This example shows the skill of a team experienced in use of PDSA testing when they realized that the simple change they intended to implement actually caused problems that might have been caught by testing. They transformed the troubled implementation into a PDSA test cycle.

Problem/Background: Since implementing our electronic registry we have generated a Diabetes Encounter sheet for every visit of every diabetic patient. This was causing the charts of some patients (especially “frequent fliers”) to become very thick.

Plan: In order to prevent this problem of thick charts we decided to generate a Diabetes Encounter sheet only for dedicated “Diabetes Visits.” No Diabetes Encounter sheet would be generated for those patients coming in for non-diabetes-related care, unless the patient’s diabetes was dealt with and then the provider would have the nurse run a Diabetes Encounter sheet before the visit was completed.

Do: Thinking this would be simple we just made the change rather than doing a formal PDSA. The first patient to come in showed us we could have a major problem. Due to the pressure from Records to change things, we let the change run for a full week and a half.

Study: Immediately it became clear that the nurses depended on the Diabetes Encounter sheet to identify diabetic patients. Basic things (like shoes off every visit) were no longer being done. Patients who were in need of labs or other services were not getting these things done either. Some of these patients may have eventually come in for a Diabetic Planned Visit, but many of our patients are acute care-oriented, and are very unlikely to come in for a dedicated visit for diabetes.

One of the biggest losses was that we were no longer getting Diabetes deficiencies highlighted, so it was very easy to overlook the needs of our diabetic patients even though they were physically present in our clinic. There was a lot of confusion on the part of the nurses who no longer understood what they were supposed to do or when they were to do it in regard to our diabetic patients. The changes we had previously implemented had been largely neutralized.

Act: The Team determined we needed to return to our original system, which we did, with a minor concession to appease the Medical Records staff. We agreed to flip the Diabetes Encounter sheet so the graph side was down, allowing for easier documentation of phone calls, etc.

What We Learned: 1) Always do a PDSA rather than starting with implementation, even if it seems like a simple change. 2) Not all change is good; don’t be afraid to change back if it’s not working. 3) There may be middle ground you haven’t identified yet.

*End of Example 10*

**Example 11: CIS: testing a way to flow data into PECS**  
**CCM component: CIS**                      **Center: DRG CHC**  
**Cycle: 2**                                      **Date: 8/7/03**

Excellent documentation of a cycle, clearly planned. Action follows rationally. Problems uncovered in the careful study section worth further reflection!

**PURPOSE OF CYCLE:**

To test our ability to extract relevant information from patient medical records and input into PECS database.

**PLAN: the change, data collection and predict**

**The Change**

- What are we testing?  
Data entry into PECS database – specifically whether the use of an EXCEL cheat sheet that lists common acronyms, diagnoses, medications and medication classes will let the PIA extract data from charts more independently
- Who are we testing the change on?  
R – the PIA (Performance Improvement Assistant)
- When are we testing?  
8/7/03
- Where are we testing?  
S site using M’s laptop with current PECS database (M is our Clinical Expert FNP who has been spearheading the implementation of PECS)

**Predictions**

- What do we expect to happen?  
The cheat sheet may need additional items, but will allow the PIA to extract important data, decipher medical terminology, and ignore irrelevant data from the chart with minimal help from M

**Data**

- What data do we need to collect?  
Feedback from M and R about usefulness of the cheat sheet, items that should be added, areas that still require clinical expertise to decipher, the ability of the PIA to work independently, and how much time it takes.
- Who will collect the data?  
M and R
- When will the data be collected?  
The afternoon of 8/7/03
- Where will the data be collected?  
S site, 2<sup>nd</sup> floor office

**DO: Carry out the change/test; collect data and begin analysis**

- What was actually tested?  
Cheat sheet utility, PIA’s ability to find, interpret, and enter data

- **What happened?**  
Data was entered from 3 charts. M initially helped the PIA extract data, then the PIA worked independently with the cheat sheet. M added items to the cheat sheet as questions came up.
- **Observations**  
R was a very quick learner. We added information about how to find EKG, Colon CA screening, LEAP scoring, and lab test descriptions and locations to the existing information on the cheat sheet. We added 2 medications to the cheat sheet. Process was time consuming, but R was able to input with little help from M. M was able to do other work as long as she was available for questions. The cheat sheet increased R's comfort with the process. The process was much easier with newer patients than with long-term patients.
- **Problems**
  - Charts are very disorganized
  - Handwriting was illegible for both M and R in several cases.
  - Dates were sometimes missing on encounter notes, and usually missing on vaccine records

**STUDY:** Complete analysis of data, summarize what was learned, compare data to predictions We found that the cheat sheet made the process easier, and was a useful tool when modified. We anticipate that once baseline patient data is entered, the process of updating charts and entering new patients into the database can be carried out by the PIA without direct supervision.

**ACT:**

- What adjustments to the change or the method of test should we make before the next test cycle?  
R will add the new items to the cheat sheet. M and R will continue with data entry.
- Are we ready to implement the change we tested?  
No – M will continue to be primary data entry person at this time, although R will participate in the process to increase her comfort level and familiarity with diabetic charts. The cheat sheet will be updated and added to as needed throughout this process
- What will the next test cycle be?  
R will enter a chart independently, and R will check the PECS data against the chart to check accuracy. We will do this next Tuesday, 8/12/03.

*Senior Leader Report* R and S tested a cheat sheet (on three charts) that allows the PIA to extract chart data into PECS. While we had to revise the sheet and uncovered basic problems with information in the charts, the cheat sheet looks promising. The PIA will use the cheat sheet to help her extract data independently from one chart on 8/21/03; work will be checked by the team clinical expert.

Center:

PDSA Form

Date: _____	Initiated by: _____	Cycle # _____
This cycle is for: _____		Other purpose: _____

**CARE MODEL COMPONENT: OrgHC Comm DelSysD DecSupp SelfMgt CIS**  
**Purpose of this cycle:**

<b>PLAN the change, prediction(s) and data collection</b>	
<b>THE CHANGE:</b>	
What are we testing?	
On whom are we testing the change?	
When are we testing?	
Where are we testing?	
<b>PREDICTION(s):</b>	
What do we expect to happen?	
<b>DATA:</b>	
What data do we need to collect?	
Who will collect the data?	
When will the data be collected?	
Where will data be collected?	
<b>DO: Carry out the change/test, collect data, and begin analysis</b>	
What was actually tested?	
What happened?	
Observations:	
Problems:	
<b>STUDY: Complete analysis of data: Summarize what was learned and compare to prediction.</b>	
<b>ACT</b>	
What adjustments to the change or method of test should we make before the next cycle?	
Are we ready to implement the change we tested?	
What will the next test cycle be? (use back of form to elaborate)	

## Notes

---