

Practice Improvement Module

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**Faculty Development Symposium
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Practice Improvement Module

Aim: To offer participants methods for rapidly improving the quality and reducing the costs of clinical services.

Objectives:

- 1. Practice the development of specific clinical improvement aims and related measures of outcomes and costs.**
- 2. Explore methods to analyze the current delivery process and identify high leverage changes.**

Practice Improvement Module

Objectives (cont'd):

- 3. Begin planning the conduct of rapid, sequential tests of change and measure the results against the original aim.**
- 4. Explore methods for sustaining positive changes and deploy them to other parts of your practice.**

Agenda

- ◆ **Introductions**
- ◆ **Practice improvement example**
- ◆ **Developing your own example**
 - ✓ **Aim**
 - ✓ **Measures**
 - ✓ **Process**
 - ✓ **Change**
 - ✓ **Pilot test**
- ◆ **Summary and next steps**

Introductions

- ◆ **Where are you from?**
- ◆ **How long have you been there?**
- ◆ **What are you interested in working on?**

“Every system is perfectly designed to get the results it gets.”

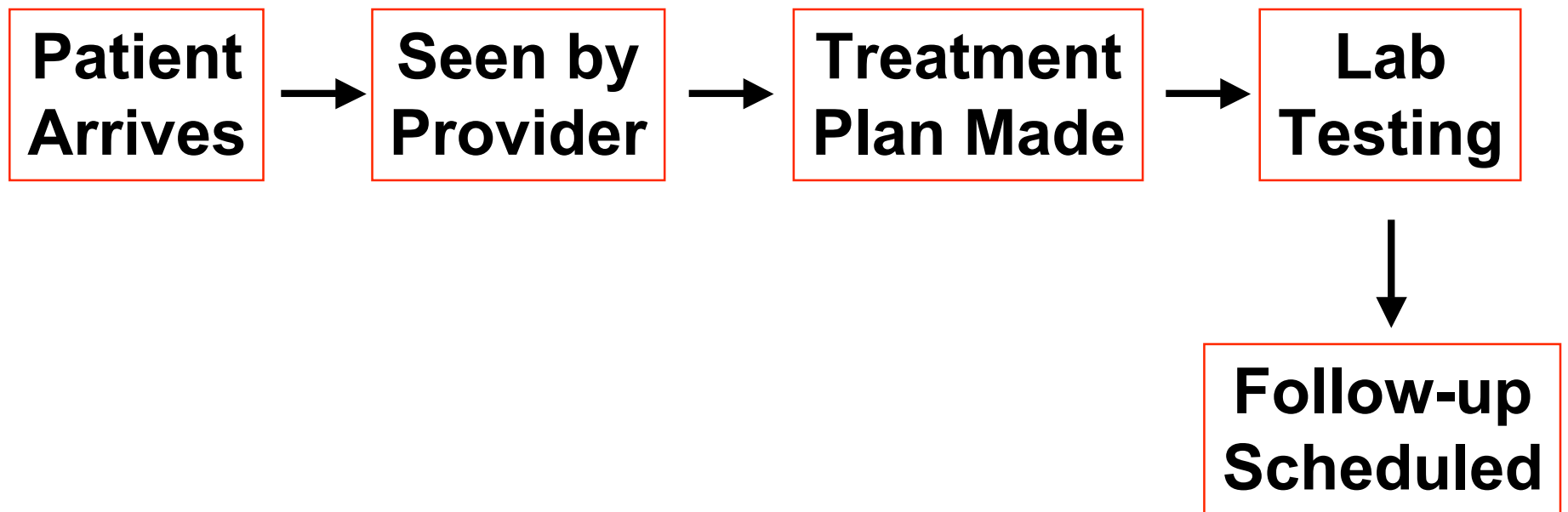
Diabetes Practice Example

- ◆ Donna Brown, R.N.
- ◆ Mary Ellen Copening, P.A.-C.
- ◆ Martha Coutermarsh, R.N.
- ◆ Linda Dacey, M.D.
- ◆ Kathy Lacoss, R.N.
- ◆ Joy Markelon, R.N.
- ◆ Valerie Stender

What are we trying to do?

- ◆ **Aim: Improve the outpatient care of people with diabetes.**
- ◆ **Population: Diabetics with hemoglobin A1C > 8.5 between the ages of 20 - 75.**

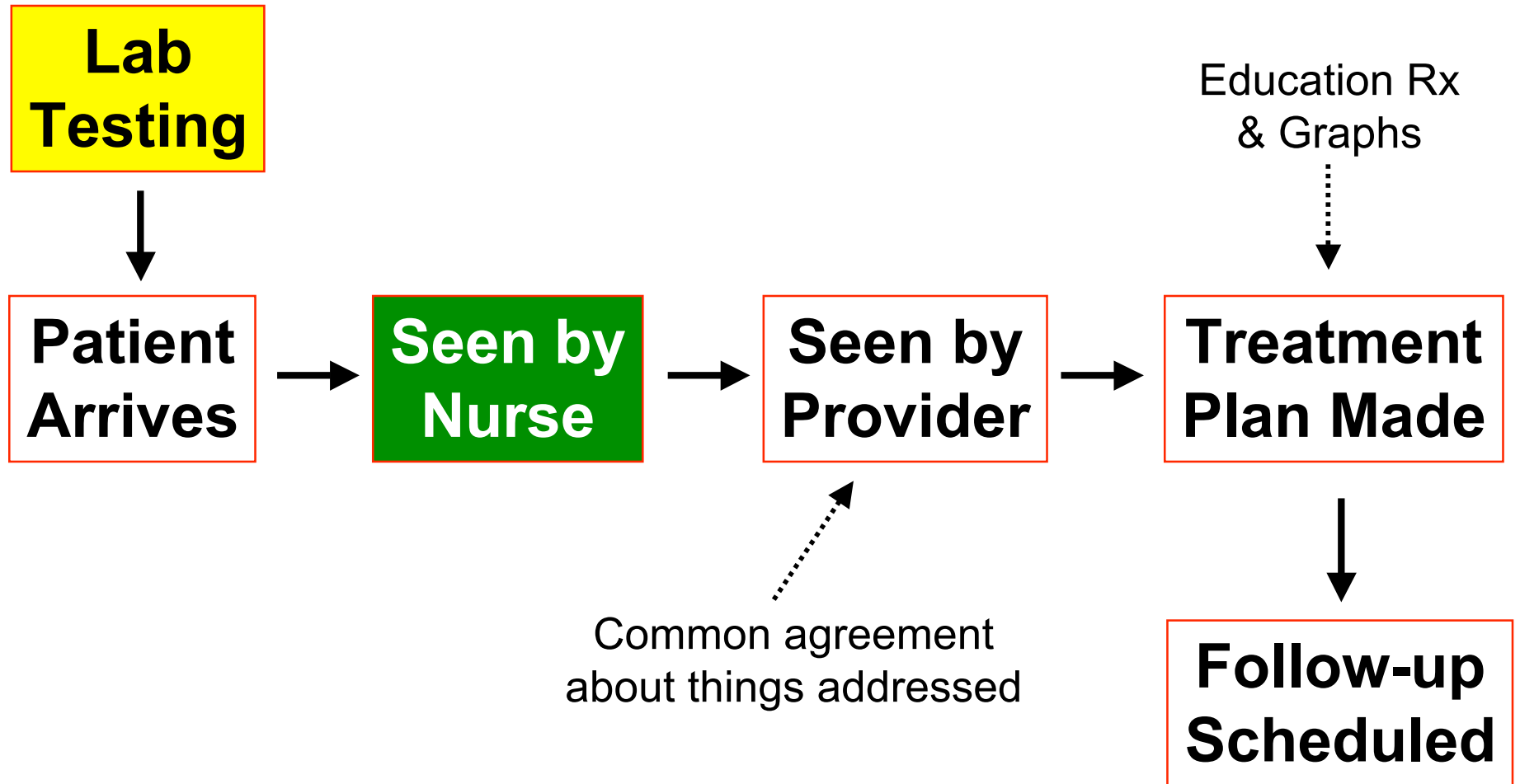
Process of Care



Interventions

- ◆ **Prescription for education**
- ◆ **Target fasting glucose and chart results**

Revised Process of Care



Approach To Measurement

functional status

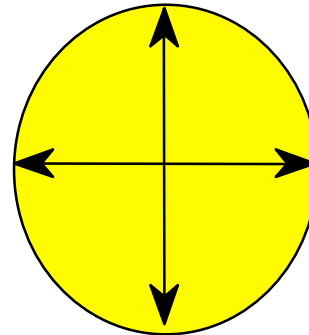
SF-36

Days missed from work

clinical outcomes

Hemoglobin A1C

Medication changes



satisfaction

Patient's perspective

costs

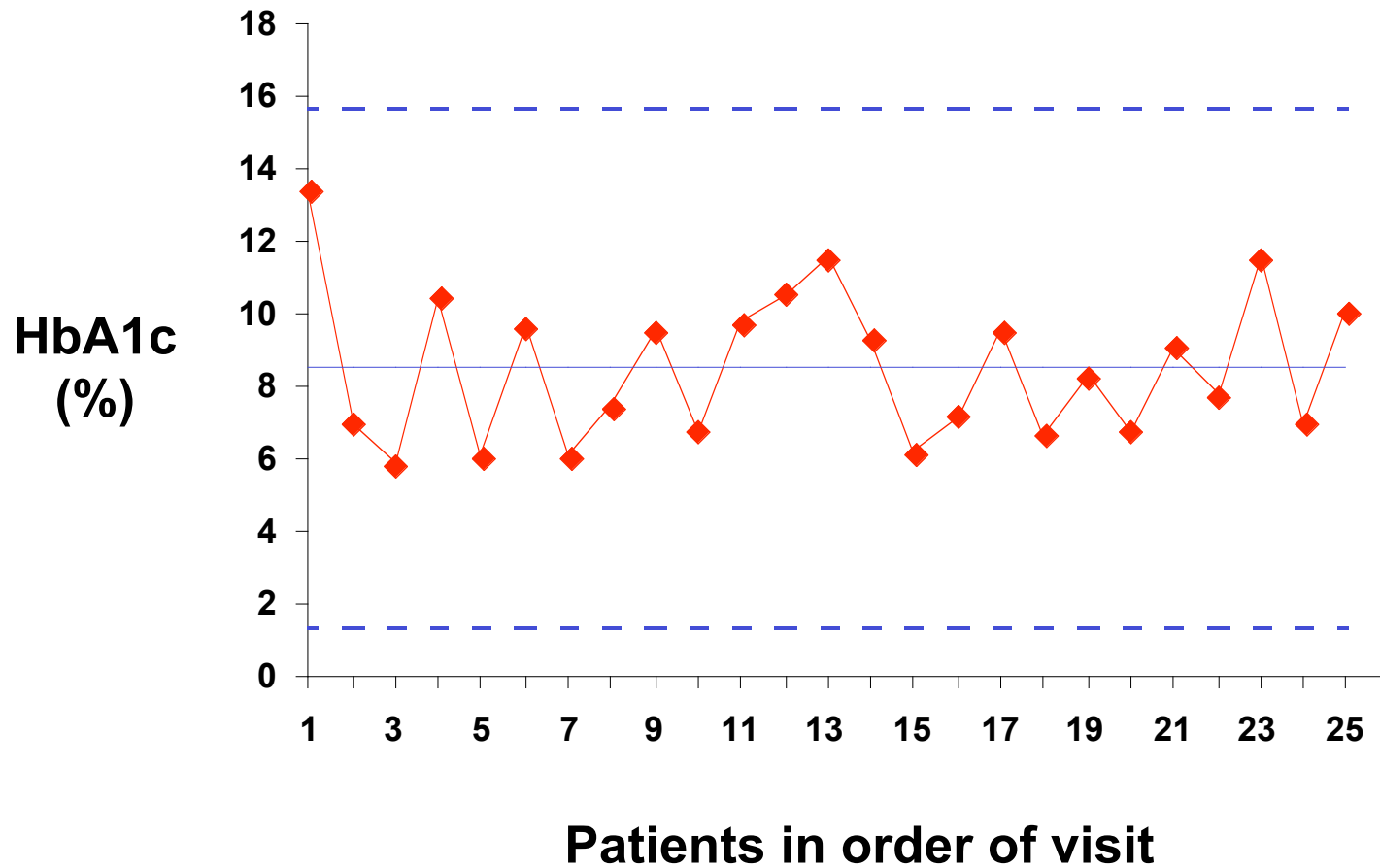
Medications

Clinic visits

Admissions

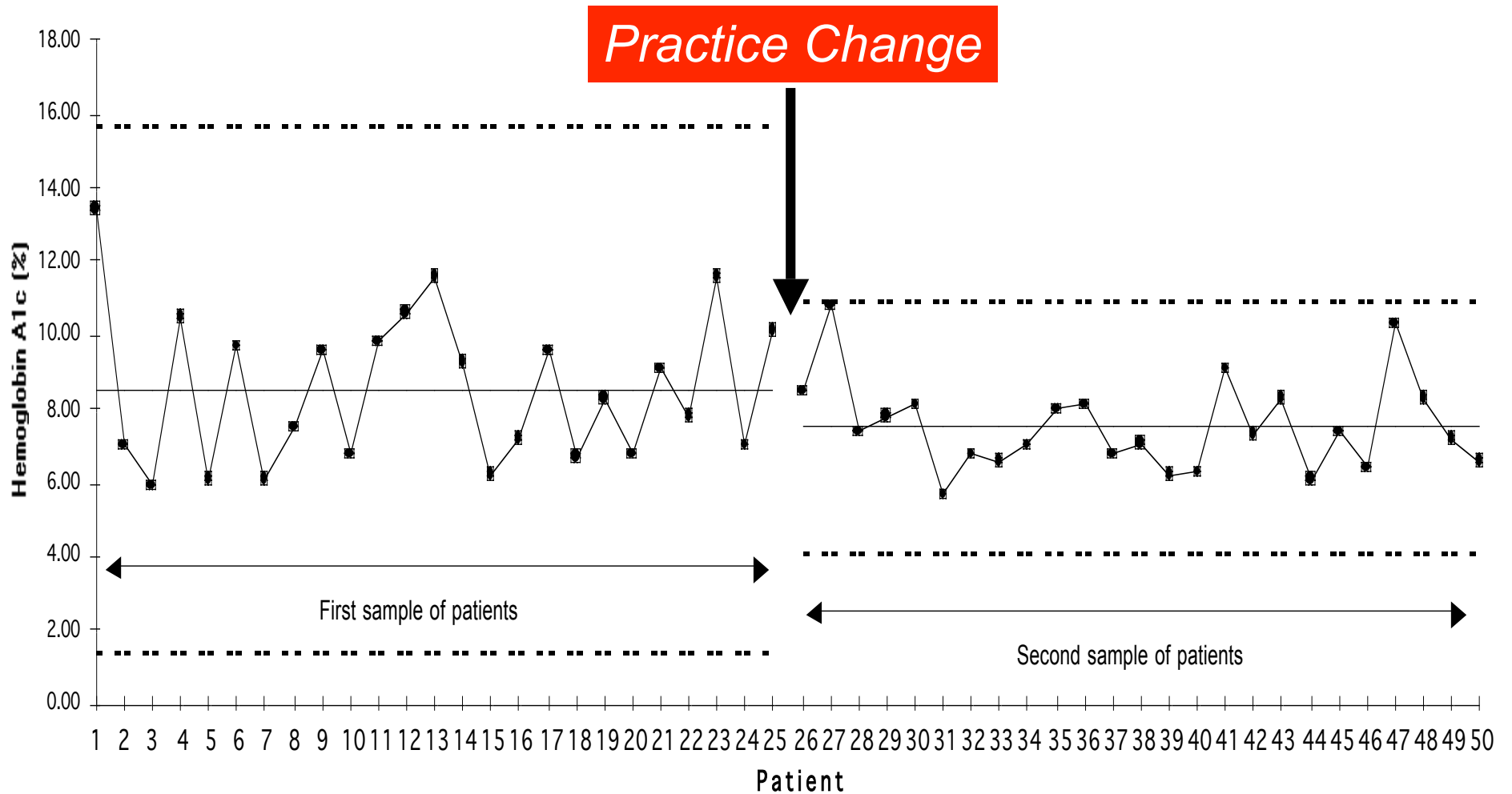
ER visits

Initial Practice Data



Follow-up Practice Data

Sample of Diabetics in a General Medicine Practice



Benefit To Patients

- ◆ **Care from the patients' perspective**
- ◆ **Balanced measurement approach**
- ◆ **Opportunities to exceed expectations**
- ◆ **Power of self-care**

Benefits To Practice

- ◆ **Shared vision of a goal**
- ◆ **Team approach**
- ◆ **Understand work and where to focus efforts**
- ◆ **Better use of time and resources**
- ◆ **Measure results**

Personal Benefits

- ◆ **Understand better what I do**
- ◆ **Ask new questions**
 - ✓ Individual vs. population
- ◆ **Work with other practices**
- ◆ **Deal with conflicts and new challenges**
 - ✓ External standards

Making This Work: Overcoming Barriers

- ◆ **Personal involvement**
- ◆ **Engage key other people**
- ◆ **Focus on the care of patients**
- ◆ **Devote time to meet and discuss**
- ◆ **Understand your organization**
- ◆ **Make public your efforts**

Getting Started: Defining the Aim

UNIT 1

Aim:

- ◆ **Select an area/category of care to improve.**
 - ✓ This should be something you are interested in continuing to work on.
- ◆ **Become familiar with the Clinical Improvement Worksheet & User's Manual.**
- ◆ **Write an aim statement for improving the health care of your population.**

Clinical Improvement Worksheet

Ref. Clinical Improvement Action Guide pp. 136-139.

◆ Side A.

- ✓ Initial orientation to the improvement sought + outcome measures + process map + patterns + structure + preliminary ideas about early tests of change.

◆ Side B.

- ✓ More specifics on test of change.

◆ Side C.

- ✓ Process worksheet -- find the steps that the patient experiences absent professional labels.

◆ Side D.

- ✓ Data collection sheet -- key is preservation of time.

User's Manual

Ref. Clinical Improvement Action Guide pp. 140-147.

- ◆ **Note that it follows the format of the worksheet.**
- ◆ **Note that each segment begins by identifying the header, explains what is meant, and then illustrates the idea or offers a tip for proceeding.**
- ◆ **Go back to p. 140. Note the “Ramp of Complexity.”**

Writing a Structured Aim:

We aim to improve...

 (name the process) .

The process starts with...

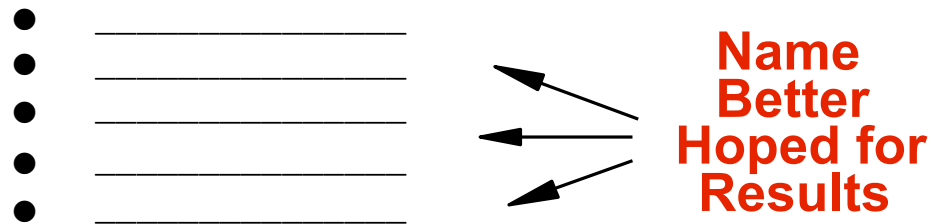
 (name start point) .

The process ends with...

 (name end point) .

Structured Aim: (cont'd.)

By working on this we expect to:



It's important to work on this now because...

LIST STRATEGIC, PRACTICAL REASONS

Exercise: Aim Statement

- ◆ **Draft an aim statement for your work to improve the care of your population.**
- ◆ **Write this on a flip chart.**
- ◆ **Briefly share your statement with the larger group.**

Measuring Outcomes and Costs

UNIT 2

Aim:

- ◆ **Select a population on which to focus.**
 - ✓ **This should be a group of patients.**
- ◆ **Draft a set of desired outcome measures for the population.**

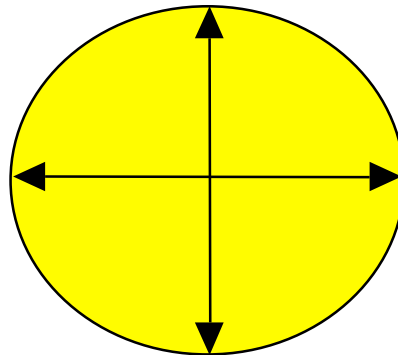
The Clinical Value Compass

- Physical
- Mental
- Social/Role
- Risk Status
- Perceived Well-being

Functional Status & Quality of Life

Biological Status

- Mortality
- Morbidity



Satisfaction Against Need

- Health Care Delivery
- Perceived Health Benefit

Costs

- Direct Medical
- Indirect Social

Exercise: Measures

- ◆ **Construct a value compass for the issue or clinical condition you have chosen.**
- ◆ **Post results on the wall using flip chart pages.**
- ◆ **Select a person to give a brief summary on your work to the larger group.**

UNIT 3

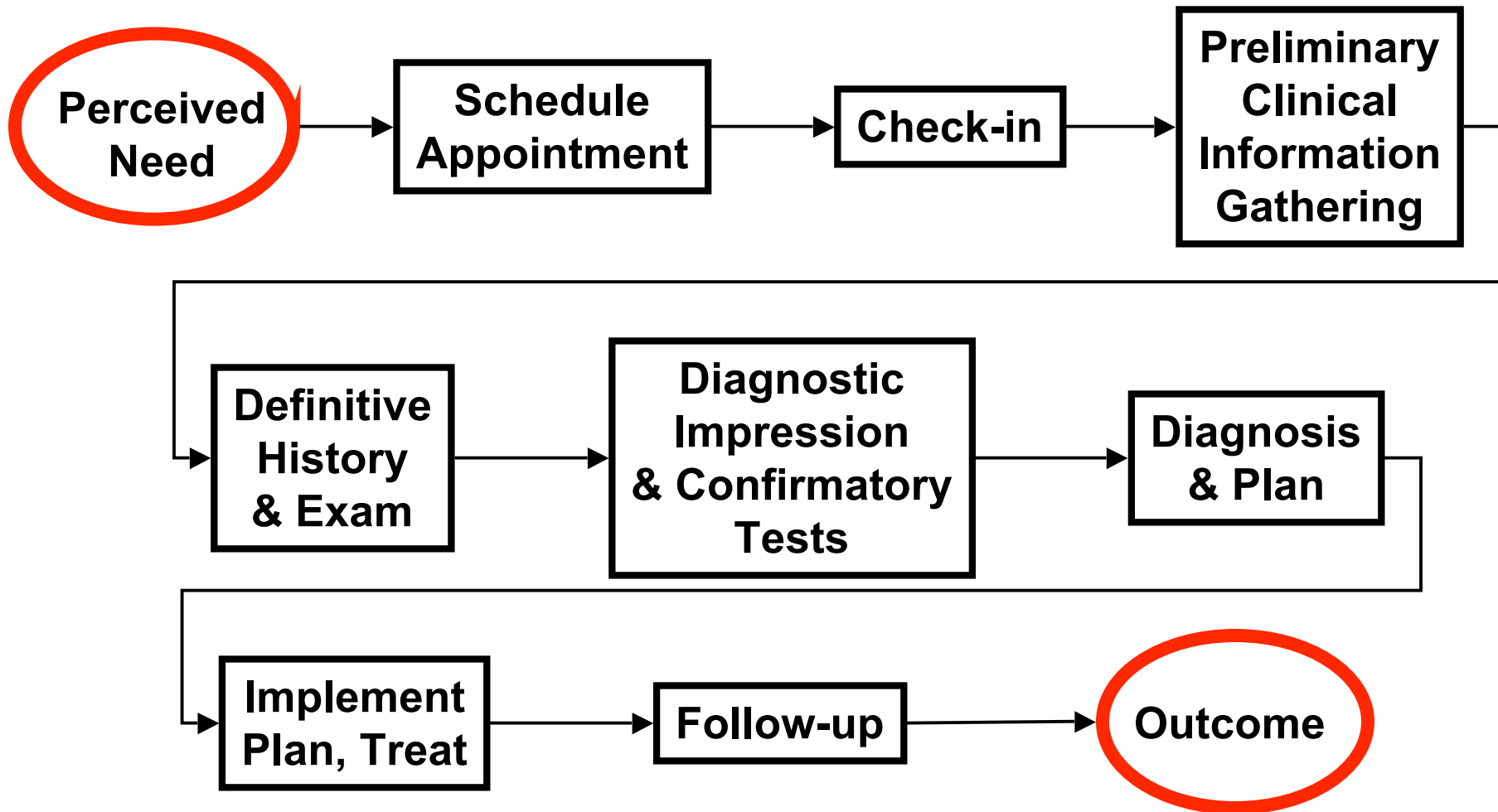
 **Process** → **Analyze the process**

What's the process for giving care to this type of patient?

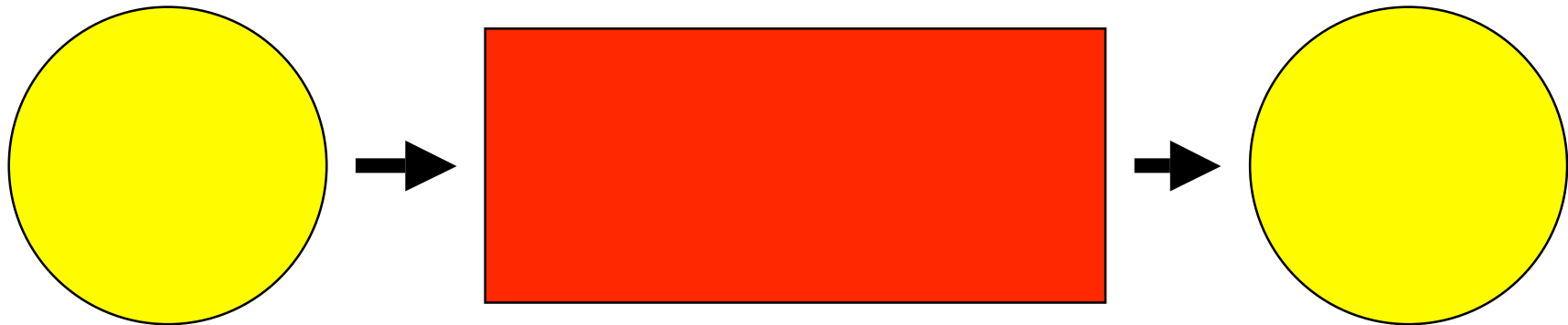
“What we need in healthcare to understand process are catwalks.”

Paul B. Batalden, MD

Clinic visit process



Clinical episode of care



Process Mapping Tips

- ◆ **Start by being specific about starting point and ending point. The process starts when patients _____ . The process ends when patients _____ .**
- ◆ **Align boundaries with the aim.**
- ◆ **Map the actual process.**
- ◆ **Identify steps as the patient would go through them.**
- ◆ **Start at a high level (5-20 steps)...and go “lower” until you find obvious things to change.**
- ◆ **List the patient characteristics most likely to influence what is done for the patient (in terms of treatments) or what happens to the patients (in terms of outcomes and costs).**

Process Mapping Tips (cont.)

- ◆ **Get general agreement from all essential players.**
- ◆ **Find the process constraints - likely early leverage.**
- ◆ **Develop supportive processes that contribute to the flow.**
- ◆ **Keep track of ideas about obvious things worth trying to change--build your change ideas “savings account.”**
- ◆ **Over time, you may enhance value of flowchart by making a deployment style flowchart and using symbols to denote key steps in flow.**

Exercise: Process

- ◆ **Construct a basic flowchart for the issue or clinical condition you have chosen.**
- ◆ **Use “Post-it” notes to indicate the basic steps in the flowchart and post work on flip chart paper.**
- ◆ **Remember to start the flowchart with a patient presenting with a health need.**
- ◆ **Share a brief summary of your work with the larger group.**

Change Concepts for Improving Any Clinical Process

UNIT 4

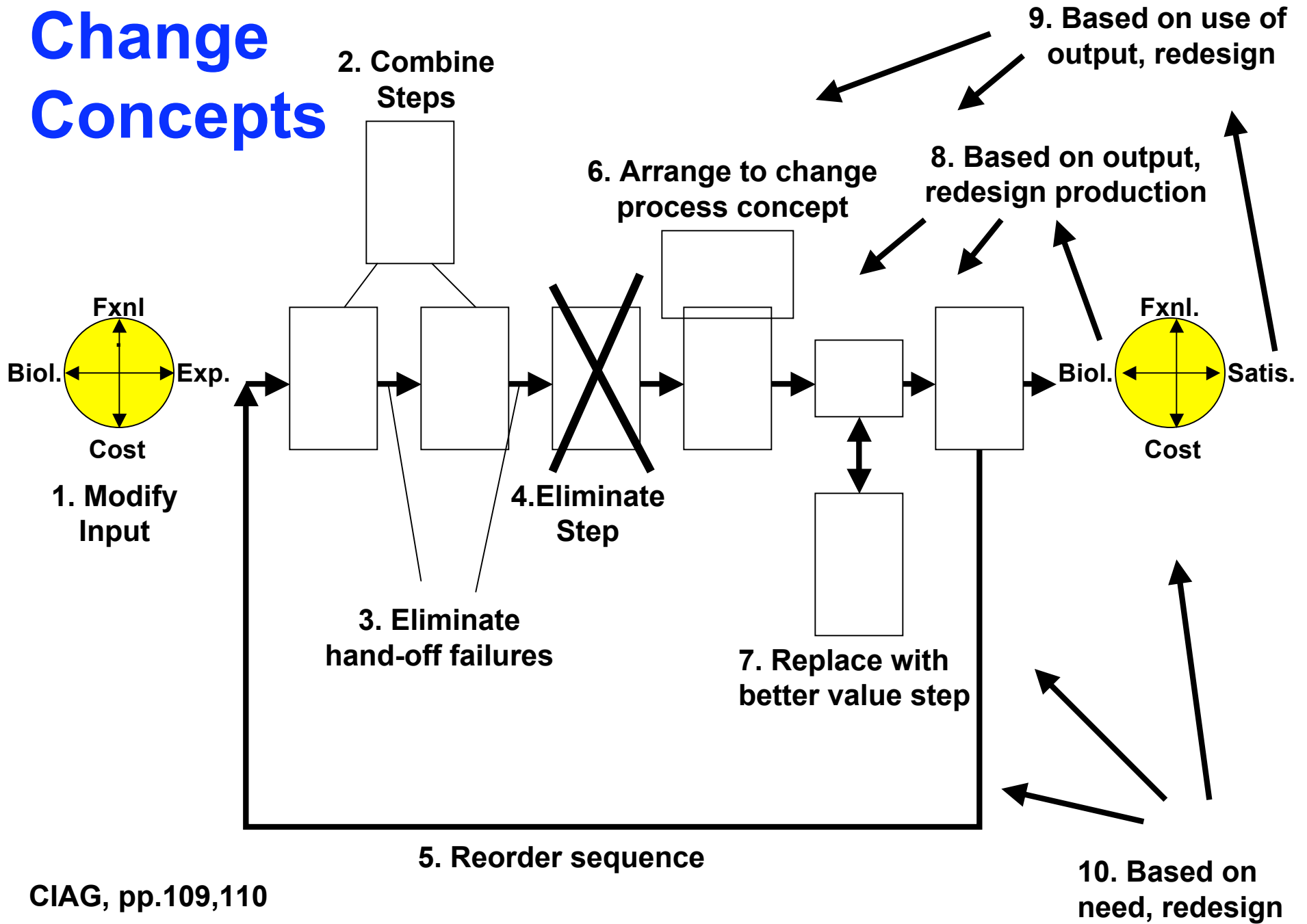
Aim:

- ◆ Appreciate the difference between a change idea and a change concept.
- ◆ Understand role of change concepts.
- ◆ Apply the idea of change concepts to your project.

Ten Commonly Helpful Change Concepts:

- 1. Modify input.**
- 2. Combine steps.**
- 3. Eliminate failures at handoffs between steps.**
- 4. Eliminate a step.**
- 5. Reorder sequence of steps.**
- 6. Change an element in process to change the whole function of the process.**
- 7. Replace a step with a better value alternative.**
- 8. Redesign production from knowledge of resulting service/product.**
- 9. Redesign service/product from knowledge of use.**
- 10. Redesign process, service/product from knowledge of need.**

Change Concepts



Groups of Change Concepts

From Langley, Nolan, Nolan, Norman, Provost. "Change Directions: The Science and Art of Improvement." Jossey-Bass, 1996.

- ◆ **Eliminate waste.**
- ◆ **Improve work flow.**
- ◆ **Optimize inventory.**
- ◆ **Change the work environment.**
- ◆ **Producer/customer interface.**
- ◆ **Focus on time.**
- ◆ **Focus on variation.**
- ◆ **Error proofing.**
- ◆ **Focus on product/service.**

Exercise: Ideas for Change

- ◆ **Brainstorm 5-10 ideas for changing & improving the process you've identified (record on matrix provided).**

	IDEAS
	● _____
	● _____
	● _____
	● _____
	● _____
	● _____
	● _____
	● _____
	● _____
	● _____

- ◆ **For each of the ideas, identify the general name the underlying change concept. For example:**
 - ✓ **Idea:** update demographic data at time appt. confirmation notice sent.
 - ✓ **Concept:** re-order usual process steps

CONCEPTS	IDEAS
X _____	● _____
X _____	● _____
X _____	● _____
X _____	● _____
X _____	● _____
X _____	● _____
X _____	● _____
X _____	● _____
X _____	● _____
X _____	● _____

Exercise: Ideas for Change (cont.)

- ◆ **Select one of the change concepts and apply it to the process to identify additional ideas worth testing.**

CONCEPTS	IDEAS
x _____	● _____ ● _____ ● _____ ● _____ ● _____ ● _____ ● _____ ● _____ ● _____ ● _____

Planning a Pilot Test of Change

UNIT 5

Like writing and running a research protocol...it's the scientific method applied to your clinical care.

Aim:

- ◆ **Planning a pilot test of change.**
- ◆ **Planning the data collection to support that test.**

Turning Over the “Gold Sheet” to Side B

**Rapid planning of (big)
change on a small scale**

Principles for Designing a Measurement Process

Aim, Users, Uses:

1. Ensure intended use and analysis of data is clear.
2. Ensure that the methods of organizing, displaying and summarizing data allow study of factors that may have important effects on the results.

Definitions:

3. Develop clear definitions of how observations are to be translated into measurements or evaluations.
4. Ensure that the method of measurement results in obtaining the intended information.
5. Ensure that the measurement methods to be used are clear, simple and minimize on-the-spot decision making.

Some Principles for Designing a Measurement Process

Planning:

- 6. Include provisions for recording potentially important auxiliary information (diary) in the design of the measurement process.**
- 7. Embed measurement and data collection into the daily activities of the system under study.**
- 8. Ensure timely measurement and data analysis.**
- 9. Develop a plan for training those who will make the measurements and record the data.**

Some Principles for Designing a Measurement Process (cont'd)

Planning:

- 10.** Perform small pilot test of definitions, methods of measurement, data collection forms and training.
- 11.** Determine who is responsible for the measurement process.
- 12.** Inform all affected associates about the purpose of collecting data.

Questions and Data Display

- 1. Write down questions that must be answered in order to know:**
 - ✓ Does **CHANGE** lead to improvement?
 - ✓ Is **AIM** being accomplished?
- 2. Design dummy data display:**
 - ✓ Write down questions that must be answered.
 - ✓ Visualize a way of displaying data that will answer your question.
 - ✓ Design dummy data display(s), fill in with make-believe numbers.
 - ✓ Ask yourself, “If I had real numbers, would this answer my question?”
- 3. Next, design your data collection plan.**

Exercise: Writing Out Your Plan

Answer the questions below for your project

- ◆ **What baseline (before)/during/after data should be collected in what way?**
- ◆ **What is the aim of this data collection?**
- ◆ **What data are you going to collect?**
- ◆ **How will the data be analyzed?**
- ◆ **Will the data be stratified? If so, what will the strata be? How much data will be collected?**
- ◆ **When will data collection start and stop?**
- ◆ **Who will collect the data and where?**
- ◆ **Who needs what training to collect these data?**
- ◆ **When will the data collection be piloted?**

Summary

- ◆ **Method you have worked with today is one way of approaching practice improvement.**
 - ✓ **Not limited to this way, but does offer a place to start.**
- ◆ **The approach is modeled after the scientific method.**
- ◆ **Many opportunities to build in use of EBM practices in this approach.**

Next Steps

- ◆ **Write down what you will accomplish on this project by Friday of next week (3/14/03).**
- ◆ **Write down what you will plan to share during the site visit to your practice.**