Risk Assessment of the Testing Processes at Access Community Health Network

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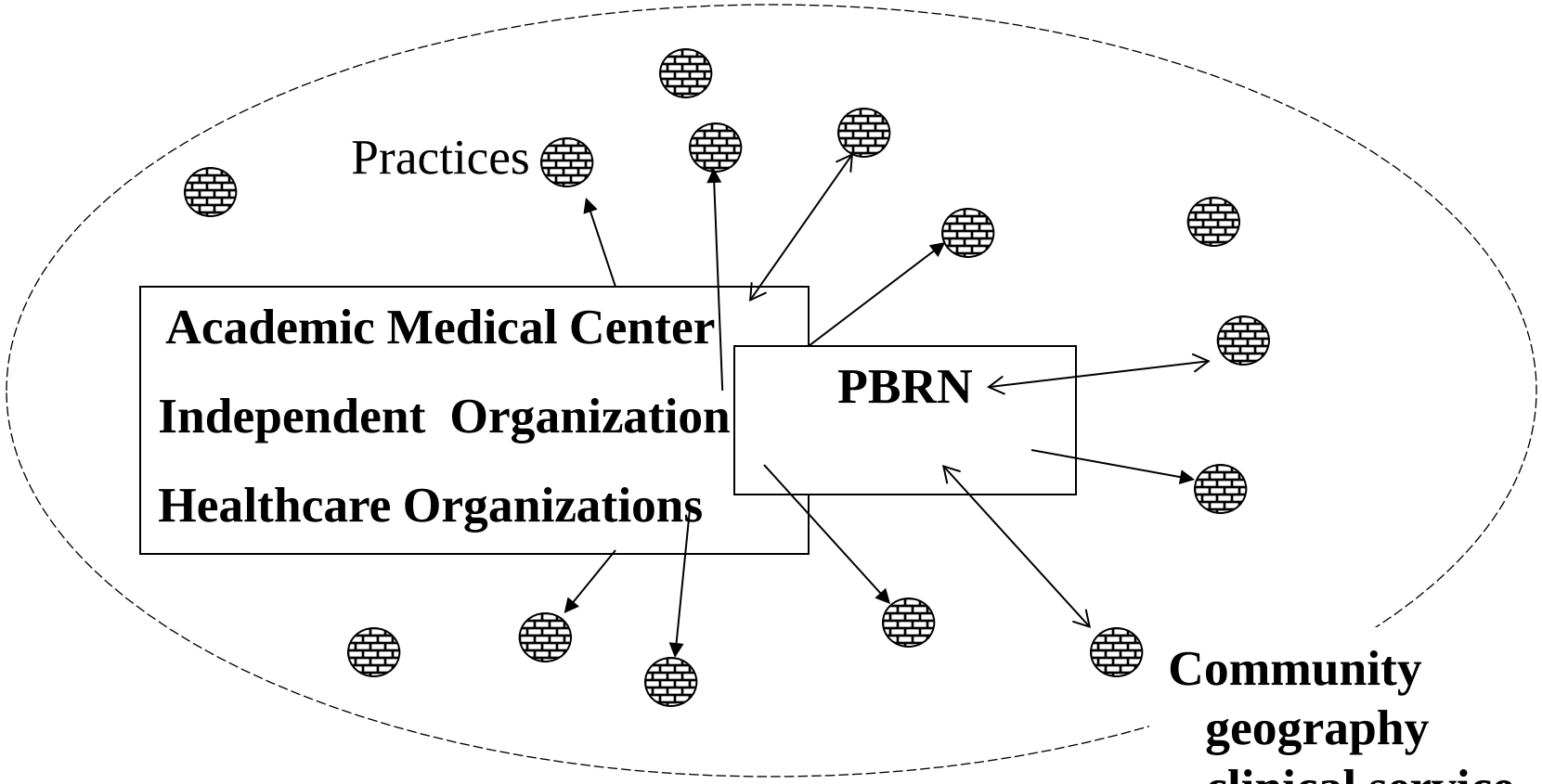
PBRNs - Emerging Structures



Research Projects and Teams

Risk Assessment of the Testing Processes of Access Community Health Network P20HS17131

Milton “Mickey” Eder, Ph.D. PI
John Hickner, M.D., M.Sc. Co-Investigator
Nancy Elder, M.D. Co-Investigator
Sandy Smith, Ph.D. Co-Investigator
Glenn Seils, Process Engineering
Jeni Fabian, Co-Investigator
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Eric Gutierrez, IT support

A Toolkit for Primary Care Practices to Improve the Safety of Testing Processes R18HS017911

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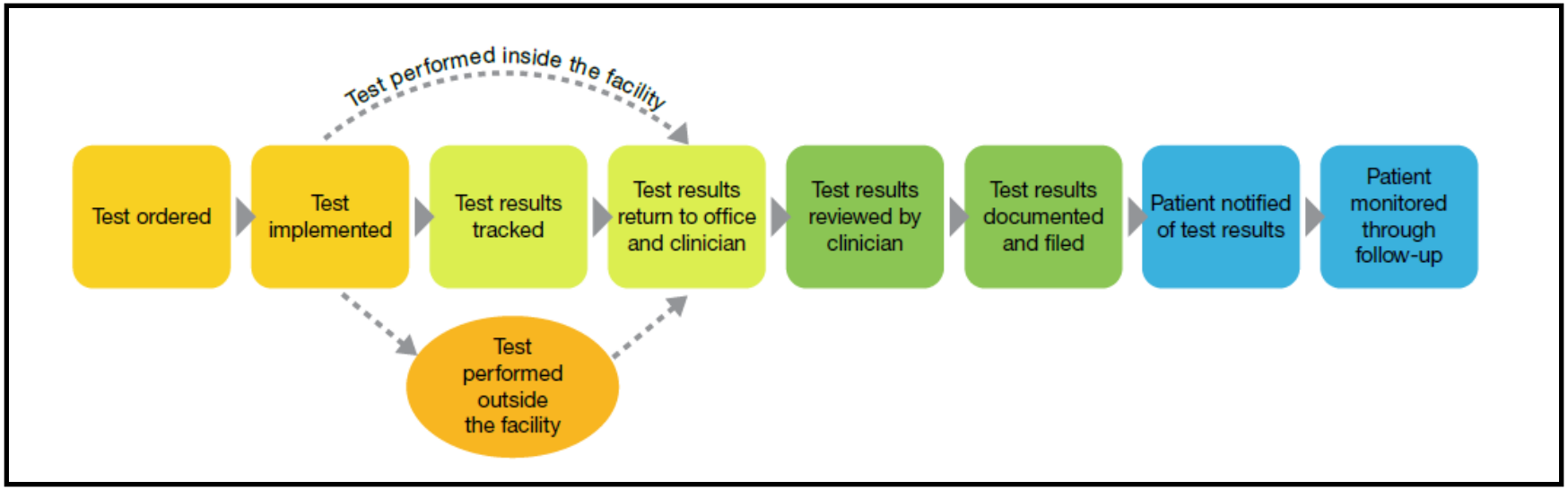
Consultants: Bruce Bagley, MD; (Terry Hammons, MD); Terry McGeeney, MD, MBA; James Meisel, MD; A. John Orzano, MD, MPH; Eric Poon, MD, MPH Glenn Seils; Leif Solberg, MD

Office System for Test Management: A Model for Primary Care

- We studied testing as on office system or process
- We did not study individual performance or accuracy of ordering tests or interpreting results



Model adapted from: Hickner JM, Fernald DH, Harris DM, et al. Issues and initiatives in the testing process in primary care physician offices. *Jt Comm J Qual Patient Saf 2005;31(2):81–9.*

Risk Assessment of the Testing Processes: a multi-methods approach

- Observational study of how health center staff manage lab, imaging, and referral orders
- Documentation Failures in an audit of Patient Medical Records
- Documentation Failures in Managing Critical Abnormal Lab Results
- Patient Phone Survey
- Medical Office Safety Culture Survey

Study design influenced by: Battles JB and Lilford RJ. Organizing patient safety research to identify risks and hazards. *Qual Saf Health Care* 2003;12(Suppl ii))ii2-ii7.

Audit of Test Results in Paper Charts

Documentation Failures in Patient Medical Records	n=2008
Test result not in chart	14%
No provider signature on test result	6%
Test result signed but not dated	27%
No documentation of provider response	13%
No documentation that patient was notified	36%
No documentation that patient acknowledged the follow-up plan *if test results were abnormal*	42%

The chart audit data may over-estimate failure rates as documentation failures are not automatically equivalent to communication failures.

Audit of Abnormal Test Results

Number of cases with at least one documentation failure **Test Type**

Testing step where the first failure occurred	Pap Smear§ n=110	Mammogram§ n=87	PSA§ n=99	INR† n= 65
Test results not returned to clinician	0	3	7	2
Clinician did not document response to test result	2	4	4	3
Patient not notified of test result	8	3	6	10
Patient not monitored through follow-up	42	10	36	7
% Total patients for which there was at least one documentation failure	47%	23%	54%	34%

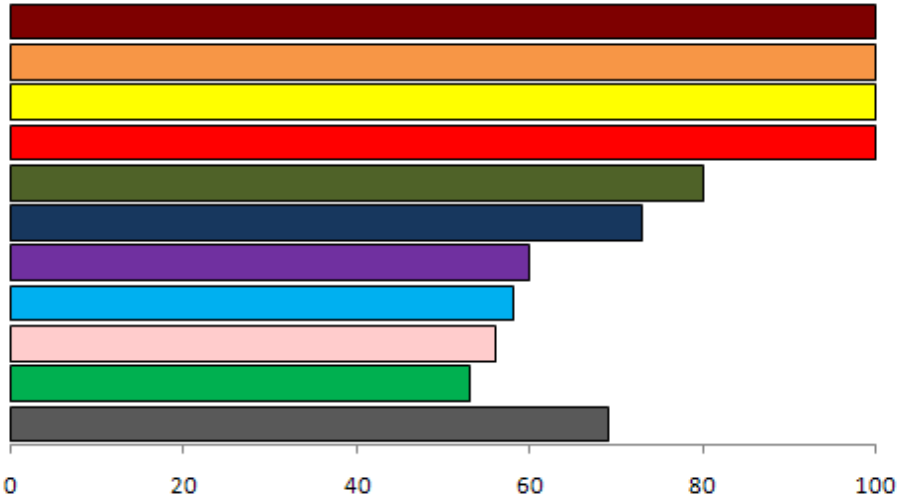
§ Patient notified of abnormal results within 2 weeks of clinic receiving report.

§ Follow up procedure conducted within 3 months of patient notification.

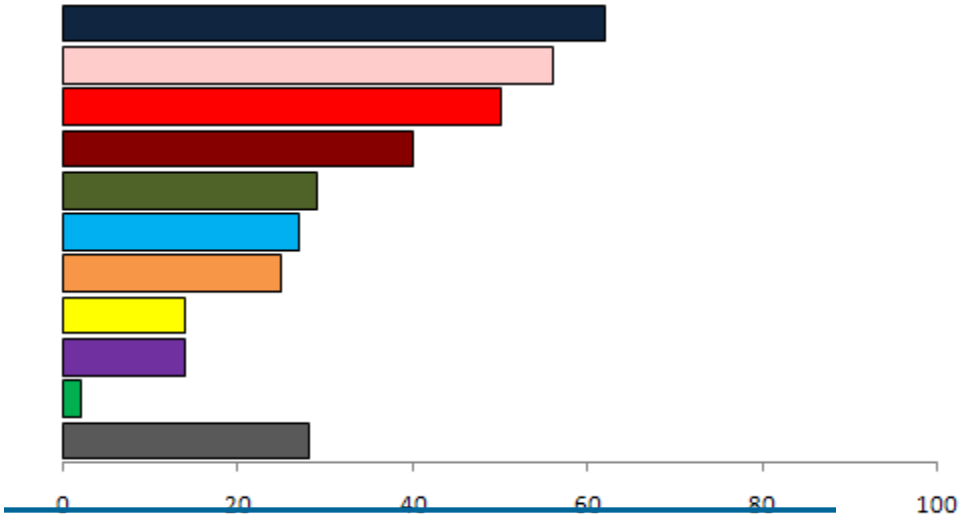
† Patient notified of dosage adjustment within 1-2 days of specimen collection

Medical Office Safety Culture Survey: Agreement with Statement by Site

Providers' mistakes are not held against them



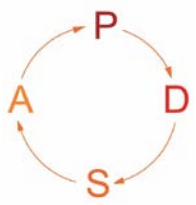
Staff mistakes are not held against them



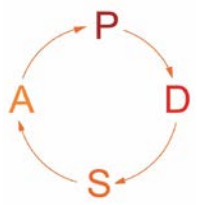
Risk Assessment: Recommendations and Conclusion

- Provide MAs dedicated time to keep all logs up to date
- Determine one method for maintaining Lab, Referral and Abnormal Logs (i.e., samples, test results, follow-up)
- Review Logs at least weekly
- Put results into charts for clinician to review
- Inform patients of both normal and abnormal results
- Verify that patients keep follow-up appointments for abnormal results

Many errors occur in managing tests, and there is great need for simple tools to help offices improve how they manage the testing process.



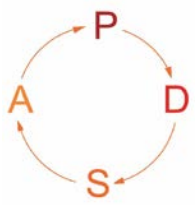
Toolkit Design Principles

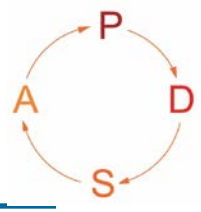


To affect change within a complex system...

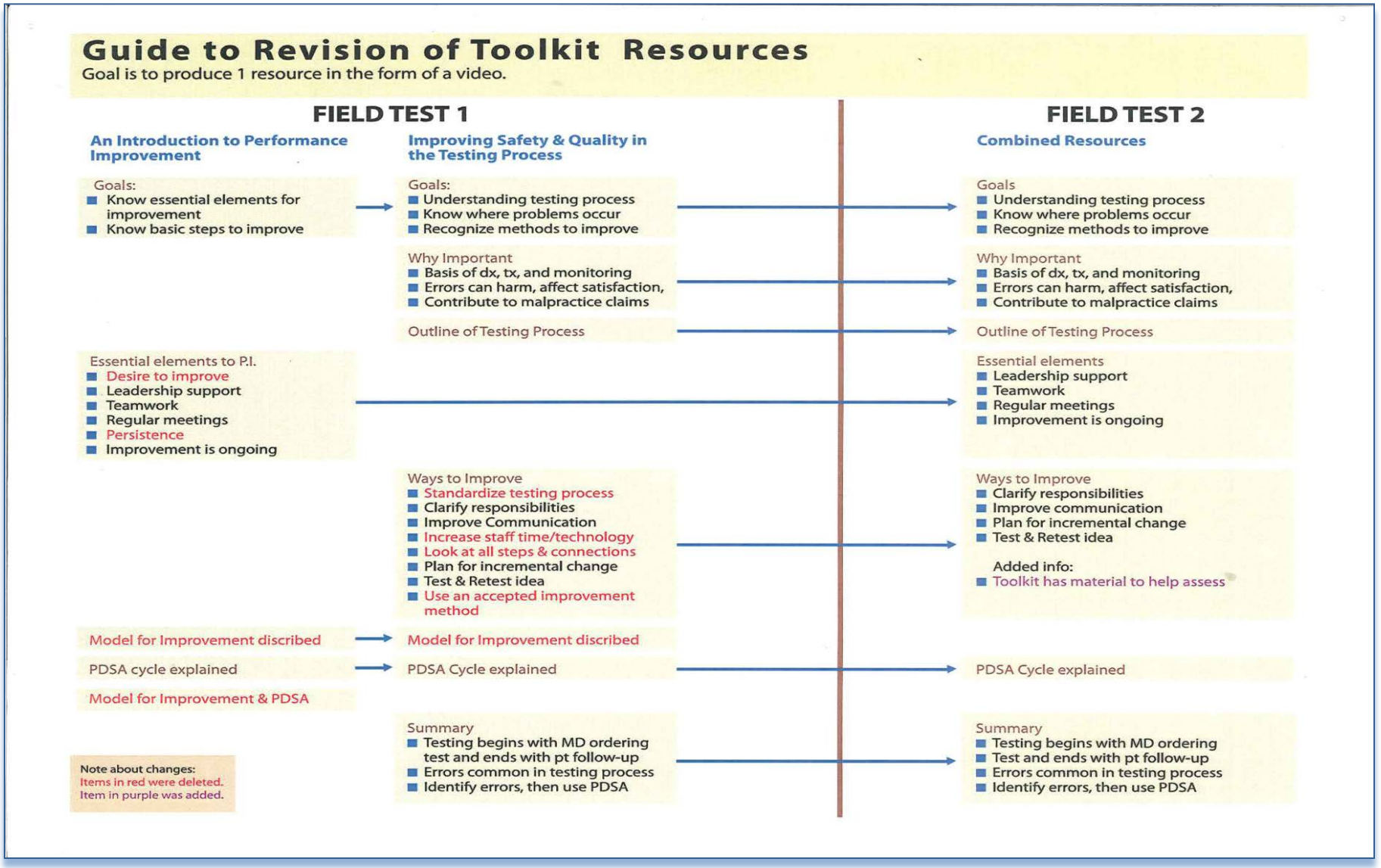
1. Develop flexible, self-contained tools that primary care practices can independently use to engage in education, assessment, and intervention activities that lead to improvements in both the quality and safety of testing processes.

2. Provide practice staff with tools that could be used within the limited time available.

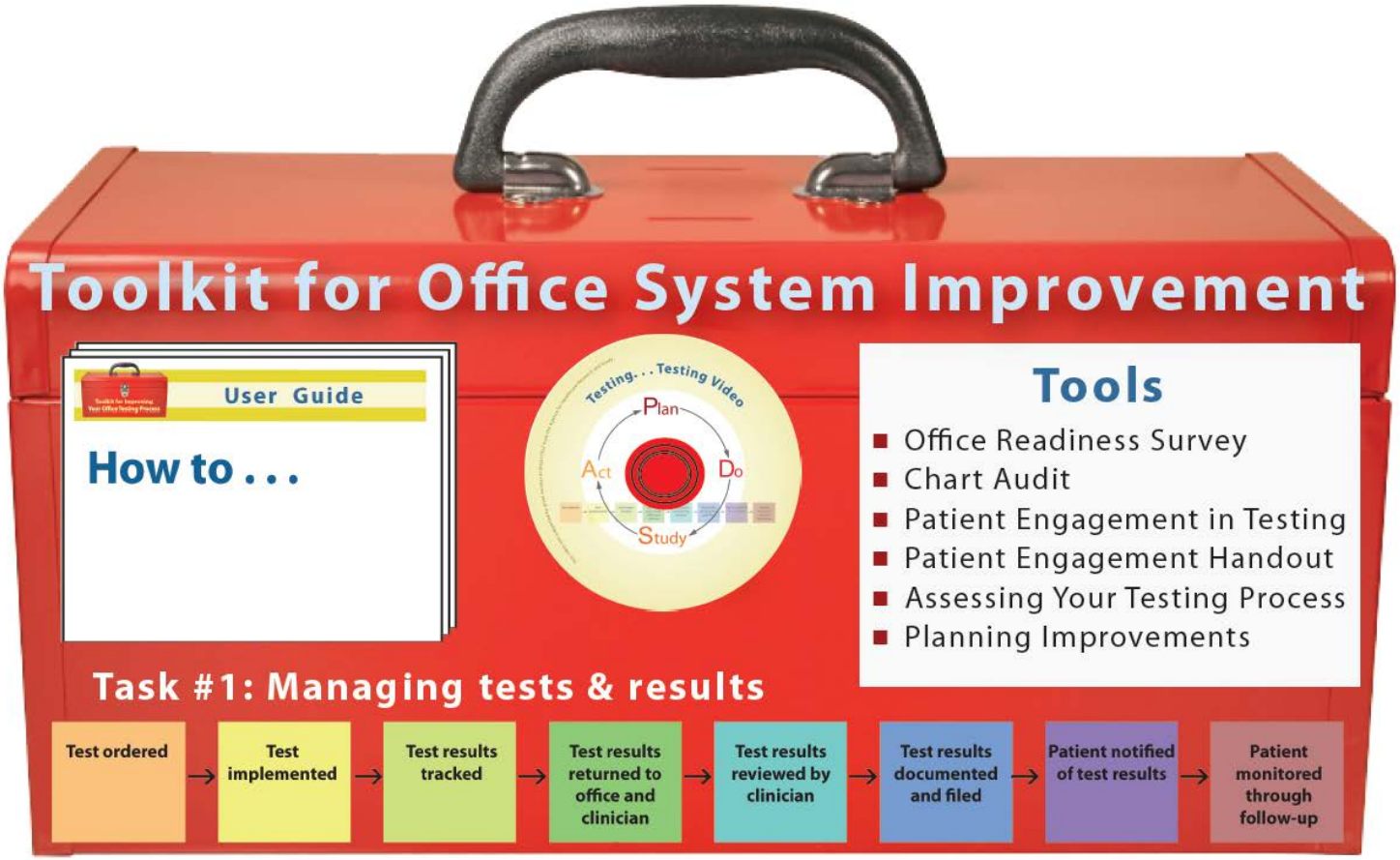




Field Tests: Iterative Development



Toolkit Version 2.0



Cover of Toolkit Available from AHRQ

Publication No. 13-0035

http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/office-testing-toolkit/index.html

STARTING THE IMPROVEMENT PROCESS IN YOUR OFFICE

You can begin the improvement process by setting aside some time during a regularly scheduled staff meeting for a discussion of laboratory testing policies and procedures in place in your office. A staff meeting presents a convenient opportunity to engage all staff members in your improvement efforts. Begin by having your staff watch the 10-minute video, which can be found at http://youtu.be/PaZvalKtC-g. Engage your staff in discussion about the video. Ask them to describe the testing process in place at your office and their respective roles in that process. Some discussion topics follow.

Part 1: A Model of the Testing Process

1. Figure 1 presents an example of the testing process. Using the example as a guide, ask staff members to describe their roles in relation to the tasks in the testing model.
2. Ask staff to discuss how the tasks within your office's testing process are organized into a system. To stimulate discussion, you might want to create a diagram or model of your office testing process on a whiteboard.
3. Within your office testing process, can staff identify where errors are likely to occur?

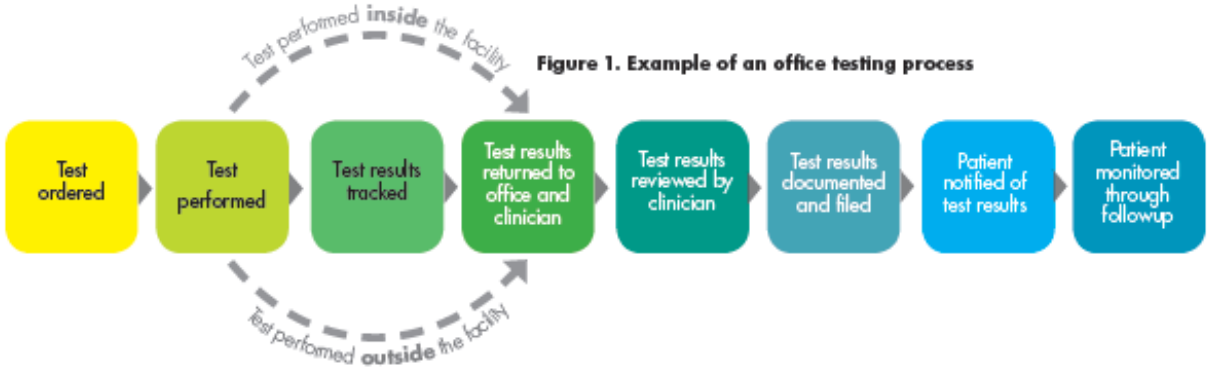


Figure 1. Example of an office testing process

Starting the Improvement Process in Your Office

Part 1. A Model of the Testing Process

STARTING THE IMPROVEMENT PROCESS IN YOUR OFFICE

Part 2: Using the Plan-Do-Study-Act (PDSA) Method for Practice Improvement

At the first meeting:

1. Discuss why the entire staff should be involved in all patient safety projects, and describe the PDSA approach to practice improvement (see Figure 2).
2. Have staff describe their work using data and information and their experience with data collection forms.
3. Ask staff to identify problems or workarounds in the testing process that consume time and effort.
   - Ask staff to identify possible solutions. Be sure to record and keep this information for future meetings.
   - Promise to bring relevant practice improvement tools to the next meeting.

Figure 2. The plan-do-study-act approach to practice improvement

At the next meeting:

1. Review the list of problems and possible solutions.
2. Work with your staff to clearly define how roles and responsibilities might change and how improvements will be measured. This may be an opportunity to introduce the Planning for Improvements Tool (see page 15).
3. Design a change in your testing process that includes simple and quick data collection.

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Starting the Improvement Process in Your Office

Part 2. Using the Plan-Do-Study-Act (PDSA) method for Practice Improvement

USING THE TOOLKIT

Every office is unique. No two offices are alike, and offices can change over time, so no single system for managing the testing process will work in every office. This toolkit will support you in the development and implementation of projects you design to improve how your office manages the testing process.

Choosing a leader for the project. We understand that the job titles of those leading a project can vary widely, so we will use the generic title of "Project Leader" throughout this toolkit user guide. The project leader can be a physician, a nurse, an administrator, or anyone else who has the skills and the desire to lead the project.

The toolkit user guide is meant primarily for project leaders. The toolkit contains more information and resources than would be needed for any one project. It is the project leader's role to identify which tools are relevant for a project and to understand how to use them.

A video is available. The support of your staff is crucial to the success of the project. The 10-minute video "Testing, Testing, Testing" is available (http://youtu.be/PaZvalKtC-g) to introduce the testing process and quality improvement to your staff. It can provide a jumping-off point for staff discussion and action.

This toolkit presents a simple model of the testing process. Although the eight tasks discussed in this toolkit are common to all offices, your office may not perform the tasks in the order described in the model.

The testing process is an office system. A good office system facilitates communication and coordination between people and tasks. It is documented with clear and well-understood policies and procedures. Office systems should not depend on the knowledge or efforts of any one individual. This toolkit will help you focus on your office system rather than on the performance of individual staff members.

Keep your project modest and manageable. Be realistic about what you can achieve in a busy office environment. Even a small change can take a lot of effort, but it also can make a big difference.

Toolkit Table of Contents

Consistent Organization of Information

- Introduction to the Tool/Topic
- Using this Tool
- Scoring the Tool
- Interpreting the Results

  e.g., don’t know responses

- What We Know about this Tool (Topic)

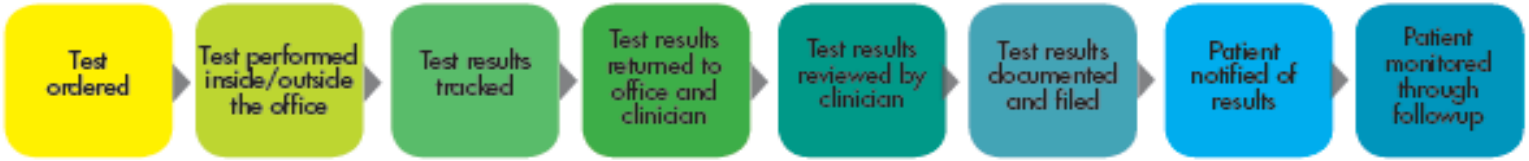
Assessing Your Testing Process Survey

Date _____ **Survey No.** _____

This survey is used to collect staff estimates of the frequency of errors and their potential degree of harm.

Describe your experience in the testing process:

- Circle the number that you feel most accurately describes the frequency of errors for each step.
- Circle the number that you feel most accurately describes the harm associated with the error.



Tasks where errors may occur	How often does this happen?			What is the usual harm for patients?				Don't know/ Not applicable	Total
	Rarely (Less than once a month)	Occasionally (Once a month)	Frequently (2 or more times per month)	None	Mild	Moderate	Severe		
1. Ordered test not done	1	2	3	1	2	3	4	1	
2. Test performed incorrectly	1	2	3	1	2	3	4	1	
3. Test results not logged/tracked	1	2	3	1	2	3	4	1	
4. Test results not returned to the physician	1	2	3	1	2	3	4	1	
5. Physician does not review all results	1	2	3	1	2	3	4	1	
6. Test results not entered in patient's chart	1	2	3	1	2	3	4	1	
7. Patients not notified of all test results	1	2	3	1	2	3	4	1	
8. Patients with abnormal results not monitored through followup	1	2	3	1	2	3	4	1	

Study Limitations

Toolkit developed within FQHCs.

FQHCs are not representative of full range of primary care contexts.

Qualitative/Iterative study design precluded determination of

efficacy (assessment of change) and effectiveness (measurement of improvement).

Comments and Questions