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Developing and testing the health literacy universal precautions toolkit

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Abstract

The health literacy demands of the healthcare system often exceed the health literacy skills of Americans. This article reviews the development of the Health Literacy Universal Precautions (HLUP) Toolkit, commissioned by the Agency for Healthcare Research and Quality and designed to help primary care practices structure the delivery of care as if every patient may have limited health literacy. The development of the toolkit spanned 2 years and consisted of 3 major tasks: (1) developing individual tools (modules explaining how to use or implement a strategy to minimize the effects of low health literacy), using existing health literacy resources when possible, (2) testing individual tools in clinical practice and assembling them into a prototype toolkit, and (3) testing the prototype toolkit in clinical practice. Testing revealed that practices will use tools that are concise and actionable and are not perceived as being resource intensive. Conducting practice self-assessments and generating enthusiasm among staff were key elements for successful implementation. Implementing practice changes required more time than anticipated and some knowledge of quality improvement techniques. In sum, the HLUP Toolkit holds promise as a means of improving primary care for people with limited health literacy, but further testing is needed.

Keywords

Health literacy; Quality improvement

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Competing Interests

The author(s) declare that they have no competing interests.

The complexity of the healthcare system makes it difficult for many Americans to receive the best possible care. More than one-third of U.S. adults have limited health literacy—the ability to understand and use health information to make decisions.[1] People with limited health literacy are less likely to engage in disease prevention behaviors, to know about their illness and medicines, and to manage and control a chronic disease.[2] Limited health literacy is associated with multiple adverse outcomes including rates of hospitalization and mortality.[2–4] Furthermore, the skills of patients, even those who have adequate health literacy skills, can decline when under the stress of illness or facing a new diagnosis.

On the demand side, medical care is complex. Routine healthcare activities such as receiving instructions at the doctor's office, taking medication, preparing for a screening test, and choosing a treatment option require sophisticated skills. Health information is often presented in such a way that proficiency in literacy and numeracy is needed to make informed health decisions. Developing systems of care that do not require advanced health literacy skills could improve the delivery of safe, timely, efficient, effective, equitable, and patient-centered care.[5]

Practicing universal precautions – structuring healthcare services to minimize risk for everyone when it is unclear which patients may have difficulty – is the best way to ensure that people have all the information they need to make appropriate health decisions. Research indicates that clinicians do not accurately identify people with limited health literacy.[6] Screening for limited literacy in practice settings is often problematic, hampered by imprecise measurement tools and patient discomfort.[7] At the same time, research indicates that materials prepared for people who do not read well are actually preferred by those who do read well.[8] Although the most vulnerable stand to benefit the most from health literacy universal precautions, system and communication changes may lead to improved care for all patients.

Healthcare providers have become increasingly aware of the communication and navigation problems their patients experience. The simultaneous publication of the Institute of Medicine's report *Health Literacy: A Prescription to End Confusion*[9] and the Agency for Healthcare Research and Quality's evidence report, *Literacy* and *Health Outcomes*,[10] brought national attention to health literacy. A variety of educational programs and resources to address health literacy have been developed. These approaches, however, have not integrated health literacy strategies into a quality improvement framework to assist practices with the redesign of processes and communication. Such an approach may help to increase adoption of best practices for the care of patients with limited health literacy.

The Agency for Healthcare Research and Quality (AHRQ) commissioned the development and validity testing of a Health Literacy Universal Precautions (HLUP) Toolkit to assist adult and pediatric primary care practices to implement such precautions. The HLUP Toolkit[11] was designed to build upon and adapt existing resources (eg, Rudd and Anderson's assessment of health centers[12–13]), identify and fill gaps, and create guidance for implementing tools. In this article, the development process and qualitative observations from implementation testing that occurred as part of the toolkit development are described.

HLUP Toolkit Development Overview

The HLUP Toolkit was developed over 2 years. The development process consisted of 3 major tasks: (1) developing individual tools (modules explaining how to use or implement a strategy to minimize the effects of low health literacy) using existing health literacy resources when possible, (2) testing individual tools in practice and assembling them into a prototype toolkit, and (3) testing implementation of the prototype toolkit in practice. The HLUP toolkit was designed for use by all staff at a practice, including physicians, nurses, receptionists, and business staff. Approval was granted by the office of Human Research and Ethics at the University of North Carolina to engage practices in the testing of the toolkit.

Advisory Panel

The study team received advice from a diverse expert advisory panel including physicians, nurses, health services researchers, quality improvement experts, and patients. Panelists identified health literacy resources for possible inclusion in the toolkit, reviewed drafts of individual tools, and reviewed the entire toolkit before it was tested in practices.

Participating Practices

This project was conducted through the North Carolina Network Consortium (NCNC), a consortium of 6 practice-based research networks (PBRNs) across the state of North Carolina. Six practices participated in the first phase of testing (Task 2). Four of these practices, plus 4 additional practices, participated in the testing of the prototype toolkit (Task 3). Practices varied in population served, size, practice type, location, and staff composition (see Table 1). All practices engaged members from all parts of the staff including nursing, physicians, practice management, and clerical staff. Representatives from all parts of the staff offered direct feedback on tools and attempted to implement tools appropriate for their position. For example, most practices that tested the teach-back tool used nurses and physicians in the testing. Practices that focused on encouraging questions usually included front desk staff, nursing, and physicians in the process.

Task 1 – Develop Tools

The initial step in developing tools for the toolkit was to scan for existing resources. Resources consisted of ideas, strategies, handbooks, training curricula, videos, and other materials that could be used by primary care practices to reduce the health literacy demands on their patients. These included both resources related to the clinician-patient encounter, as well as those that involved practice-wide redesign. The search team explicitly avoided identifying health education materials related to specific diseases or health topics, as that was beyond the scope of this toolkit. The team conducted the scan by: (1) searching the Internet using the Google search engine and key words such as health literacy, health communication, and health education materials; (2) making general inquiries to health literacy organizations, including the North Carolina Program on Health Literacy (www.nchealthliteracy.org), the National Institute for Literacy (NIFL) Health Literacy listserv group, and practices in the NCNC; and (3) interviewing practices identified as exemplar with regards to health literacy practices.[14]

More than 250 resources were recorded and catalogued according to media type, author, price (only free resources were considered for the toolkit), type of resources, and usefulness for the toolkit on an Excel spreadsheet. Gaps were identified where ideas and strategies existed but there were no suitable materials to support them. For some categories, there were multiple resources that addressed the same health literacy practice. Furthermore, as anticipated, many of the resources did not include instructions on how to use the resource in clinical practice. Building on existing, freely available resources, a set of 22 prototype tools were constructed. Each tool, 2–4 pages in length, used a concise format designed to enable primary care practices to take quick action. Each tool contained 5 sections: (1) Overview, (2) Purpose, (3) Action—with the nuts and bolts of how to implement the tool, (4) Track Your Progress—with measures for implementation, and (5) Resources. Each tool linked to resources available on the Internet; resources not available on the Internet were included as appendices to the toolkit.

The tools were organized into 4 categories: improving spoken communication, improving written communication, improving self-management and empowerment, and improving supportive systems. We arrived on these categories after reviewing the tools and looking for the general themes. Each of these categories addresses an important facet of caring for people with low health literacy. First, as is often discussed, improving spoken communication is critical for the patient-practice interactions. In addition to spoken communication, practices frequently communicate with patients using the written word with patient education materials, letters about tests and appointments, or even billing. We felt that some attention to self-management and empowerment, and how a practice can enhance this process for people with low health literacy (who face special challenges in managing their conditions), was an important separate element. The last category, improving supportive systems, addresses the fact that people with low health literacy struggle with several aspects of understanding information outside of the clinical office. Supportive systems, such as referral to literacy programs, other community support, or helping patients obtain their medications, may be important avenues in the care of patients with low health literacy.

Task 2 – Test Individual Tools and Assemble Prototype Toolkit

Because the final tools were a combination of existing ideas and resources, as well as the product of our attempts at translating them to clinical practice, feedback was sought from clinicians and other staff who would use the tools. Six practices each were asked to test 4 tools over a 2-week period. The testing was on a very small scale (involving 1 or 2 staff members), and was guided by the Plan/Do/Study/Act (PDSA) model.[15] PDSAs are a defined process of testing changes, often on a small scale, in order to accelerate learning in an organization. This structure allowed us to have rapid evaluation and feedback on the tools and to help the practices develop a strategy for testing new innovations for implementation across their practice. Practice staff then participated in a debriefing call with the study team in which the staff described what they did, how they did it, and what they liked and did not like about the tool. They also were encouraged to offer any ideas on how the tool could be improved.

Table 2 summarizes findings from testing the individual tools. Practices agreed that all tools they tested were important parts of the toolkit, but believed some were similar to each other and could be consolidated. Responding to this feedback, 2 tools related to the physical office environment and 2 tools on linking patients with community resources were combined, reducing the number of tools from 22 to 20.

Practices recognized that some tools were easier to implement than others, and some tools were avoided because staff felt they would take too much time. These more demanding tools were included in the prototype toolkit nevertheless, as it was thought that the tools could prove valuable to practices that undertook long-term practice redesign, such as creating a telephone follow-up system with case management or redesigning all written materials. Furthermore, changing healthcare policies (eg, the increase in the federal matching rate for interpreter services under the Child Health Insurance Authorization Act and reimbursement for patient-centered medical homes) might make implementing these tools more feasible in the near future.

Some practices appreciated the “Track Your Progress” section of the tools as a means of measuring what they set out to accomplish. Some staff in practices requested that we add a time frame for how long the implementation would take for each tool. The request was studied, and it was decided that a time of implementation for most of the tools could not reasonably be estimated, so it was not included.

A few gaps were identified as the result of the testing of individual tools. One such gap was that practices felt a video would be very helpful to illustrate the teach-back process. No useful teach-back video was found in the scan of resources, so one was created for the toolkit. Another gap resulted from the fact that many practices did not have experience with quality improvement techniques such as the Model for Improvement[15] and PDSA cycles that were used as a testing and implementation strategy. The Model for Improvement is one approach to systematically implementing new processes and procedures and is commonly used in medical practice change interventions. Such a strategy is helpful to facilitate reliable implementation. Although this strategy is advocated by the Institute for Healthcare Improvement and other organizations, most clinicians and staff in practice have not yet been exposed to these techniques.[16] With some practices a great deal of time was spent explaining how to do small-scale tests of change and walking them through the process. From this experience the need for explicit direction about implementing small tests of change, and examples on how PDSA worksheets might look while implementing a tool, emerged. These directions were created and included as part of the appendix. In addition, to help facilitate the practice change process, 3 of the tool–those that focused on forming a health literacy team, assessing their practice, and conducting training on health literacy—were pulled into a section called Path to Improvement, to help practices integrate the other tools into their operations.

Task 3—Test Prototype Toolkit

Eight practices participated in the testing of the prototype toolkit. Each received a notebook binder of the toolkit as well as the entire toolkit contents on a CD-ROM. A detailed testing

plan was prepared to guide the practices over a 4-month testing process and to facilitate their feedback throughout the process. The written plan contained 3 milestones:

> Milestone 1: Formation of a health literacy team and review of the toolkit.
>
> Milestone 2: Health literacy assessment of practice and selection of 5 tools to implement.
>
> Milestone 3: Tool implementation over an 8-week period.

The study team debriefed each practice team when a milestone was reached. For example, at Milestone 1, the study team sought feedback from the initial read of the toolkit and reviewed progress on establishing a health literacy team. At Milestone 2, the team reviewed the results of the practice assessment and discussed the practice's rationale for choosing tools to implement. At Milestone 3, the team reviewed the progress of implementation as well as successes achieved and challenges faced. This process gave the study team an understanding of how practices used the toolkit and helped the study team to modify the toolkit to increase usability. The testing occurred from July–October 2009. Each call was recorded, and the team held a debriefing meeting to ensure all of the feedback was captured.

Although practices were asked to implement 5 tools in 8 weeks, some practices did not have the resources or capacity to support this amount of change at one time. They suggested focusing on 1 or 2 tools at a time. This finding reflects the difficulty of making process changes in practice.

Overall, the toolkit was well-received (see Table 3). Practices found the toolkit to be useful, and the format of the toolkit was popular. For example, a physician at a pediatric urban practice said, "When we introduced this toolkit to our staff, they thought 'Oh great, more responsibilities for us to cram into our busy day.' But what we quickly realized is that it is not adding more, it is about learning how to do things differently. After implementing some of these tools, we really felt like we were more able to connect with our parents about the health of their child." Practices found the practice self-assessment tool to be indispensable for proceeding with the work, and particularly liked how the assessment informed them about which tools would be the most useful in addressing areas of weakness. Most practices commented that the American College of Physicians Foundation health literacy video in the Raise Awareness tool (Tool 3) was extremely helpful in generating enthusiasm among practice staff. There were varied opinions on electronic-based or paper-based formats, suggesting that having both available would be optimal.

The practices that were most successful implementing tools were effective at winning the hearts and minds of practice staff about the importance of considering health literacy when providing services and support to their patients. Even so, the perceived time commitment needed to implement health literacy universal precautions was a challenge. After working through the toolkit and making some changes, the practices recognized the benefits of establishing health literacy universal precautions, but noted the significant amount of work and commitment involved to make these changes. Performing all suggested tasks would have been difficult without support from the study team.

Many of the testers in the practices did not want to read through the toolkit in great detail, but wanted to jump straight to implementation. After completing the testing process, however, the practices acknowledged that it was beneficial to perform all steps suggested by the toolkit, starting with forming a health literacy team through the implementation of tools.

The study team received helpful feedback for modifications to the toolkit. Most of these suggestions related to navigation in the toolkit and ways to streamline the overall process. Suggested changes included:

- Provide a list of steps for using the toolkit and include the list as one of the first pages.
- Watch the health literacy video as the first step.
- Make it easier to find the tools.
- Shorten the introductory text.
- Include some practical examples of how the tools were helpful.

One objective that emerged from this testing was to identify a strategy to break the tasks down into manageable chunks to make the toolkit less intimidating. The following suggestions from the practices were implemented:

1. **Quick Start Guide.** This guide provides a streamlined method for introducing the concept of health literacy universal precautions. This is not intended as a substitute for the overall process of implementation, but as a way to quickly demonstrate the effectiveness of implementing one or more concepts. This guide links to the American College of Physicians Foundation health literacy video, and then provides 3 choices for a small-scale implementation of a key health literacy concept that will likely deliver meaningful results in a short time. It is hoped that this will provide a faster method of recognizing the importance of health literacy to a practice that would otherwise be intimidated by starting the process.
2. **Electronic Access to the Toolkit.** The online PDF of the toolkit provides the user with a document that can be easily navigated and contains links and visual cues for all the toolkit resources. (Toolkit can be found at www.nchealthliteracy.org/toolkit or http://www.ahrq.gov/qual/literacy/). In addition, for those who prefer working from a printed document, the option to print all or part of the toolkit contents was provided.
3. **Streamlined Introductory Text.** The Overview of Health Literacy Precautions was condensed to 4 pages, including figures illustrating common health literacy tasks encountered by patients and how the toolkit could contribute to the improvement of health outcomes.
4. **Testimonials and Tips.** Quotes and implementation advice from pilot practices were incorporated into the toolkit.

Discussion

Health literacy research and advocacy is getting more and more attention from clinicians and policymakers.[17] Clinicians and practices need a useful roadmap for implementing strategies that support care for people with limited health literacy. But implementing changes in practice is not an easy task, and the best of intentions can fall short. The development and pilot testing of the HLUP Toolkit suggests that the study team has identified the key content from current knowledge and resources in health literacy and configured the information in a way that practices find useful. The team also learned that making these changes in practice requires substantial commitment from members of the practice, and implementation is likely to take place over several months as practices adopt new protocols and procedures.

The study team observed that practices approached the toolkit from different perspectives with different learning styles. Some participants wanted to read through the background and understand the details of the process; they were the minority. Most wanted to get the gist of the idea and begin implementation of the tool right away. For example, the teach-back tool was very popular, but it was observed that most testers did not read through the whole tool and follow the recommended steps. Rather, once they understood the concept, they decided they would try it a few times. This approach gave them quick experiences, but these experiences may have been limited because a quick, partial read might result in their missing some of the intended nuances.[10] For example, individuals were encouraged to use a worksheet to reflect on the teach-back process and modify their approach based on that reflection as a means to more fully integrate the strategy into practice.[18] Some practices did not do this because they missed the suggestion, not because they overtly decided not to use the worksheet.

Diffusion and adoption are well-studied phenomena and are known to take time.[19] New research doesn’t enter clinical practice for an average of 17 years from proof of the idea.[20] Even at that point, most indicated services are not provided to patients reliably.[21] As such, the difficulty of reliable implementation of health literacy universal precautions should not be surprising. Indeed, in feasibility testing among highly motivated practices, it was found that 2 months was only long enough to do initial testing of tools, but not long enough to begin to spread these changes throughout the practice. Other major practice change efforts have found similar results.[21] Strategies such as collaborative improvement networks and practice facilitation may help to accelerate implementation, but most such studies still demonstrate slow penetration of reliable processes.

The HLUP Toolkit was designed so that users could take it off the shelf and start making changes in their practice. However, it is also designed to be used as a change package for a collaborative improvement project or with practice coaching. The process changes are presented in list form with process measures that can be used to assess implementation. Such coordinated improvement efforts can help to hold practices accountable in the face of many competing demands and also build on enthusiasm conveyed by peer interaction around the change ideas.

This study has important limitations that prevented the team from drawing definitive conclusions regarding the HLUP Toolkit. This study documents the developmental process of the toolkit and initial testing of individual tools and the prototype toolkit. The result of this process is a "Version 1.0" design that can be improved upon over time. Involving several clinicians and staff from diverse primary care practices in the development should improve the usefulness of this toolkit. The participating practices were motivated and interested in the topic of health literacy. Their feedback reflects this interest in the topic and may not represent the average primary care practice. Lastly, whether this toolkit improves health care quality measures or health outcomes was not tested. Additional research on complete implementation of the toolkit and assessment of outcomes could help to increase enthusiasm for using the toolkit.

In conclusion, practices have little enthusiasm for tools involving lengthy and complex instructions, but will use those that are concise and actionable. The HLUP Toolkit holds promise as a means of improving care for people with limited health literacy in primary care practices. Implementing health literacy universal precautions is feasible, but like all quality improvement, it is likely to take a long time.

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Table 1

Description of Practices that Participated in the Individual Tool Testing, the Prototype Toolkit Implementation, or Both

Practice	Testing Phase Participation	Population Served				Ages Served		Affiliation	Free	Location	Number of Providers	Number of Staff
No.	1st testing or Final testing	AA	NA	Hisp	W	Adult	Pediatric	Yes/No	Y/N	(Urban/Rural)	(MD, PA)	# Emp/# Vols
1	Both	X				X	X	Y	N	Urban	9+6 residents	50
2	Both			X	X	X		N	Y	Urban	7	2/30
3	Both		X	X	X	X	X	Y	N	Urban	11	40/50
4	Both			X		X	X	Y	N	Rural	5	25
5	1st	X	X		X	X	X	N	N	Rural	1	4/0
6	1st	X		X	X	X		N	Y	Rural	12–15	7/200
7	Final	X			X	X	X	N	N	Urban	3	17
8	Final	X			X	X	X	N	N	Rural	3 MD/3 PA	30
9	Final	X			X	X	X	Y	N	Urban	57	39
10	Final			X			X	Y	N	Urban	10+2 (32 residents)	25/0

Population Served:
X ≥ 20% of practice population
AA = African American
NA = Native American
Hisp = Hispanic
W = White Providers:
MD = medical doctor
PA = physician assistant

Affiliation:
Y = Affiliated with Health Care Organization
N = Independent/private practice

Table 2

Key Findings from Testing of Individual Tools

Tool Name	Key findings when testing these tools
Tools to Start on the Path To Improvement	
Tool 1: Form a Team	• If a team was not formed, change did not happen. • The more diverse the team, the richer the input. • Not one practice selected a patient to be on their team.
Tool 2: Assess Your Practice	• More than one discipline assessing the practice brought more depth regarding strengths and weaknesses. • The assessment was both motivating and a discussion starter. • Completing the assessment often changed the priorities the team had identified prior to the assessment. • Many liked how the assessment also listed the tool(s) to improve each deficiency and the rankings of importance of the tools.
Tool 3: Raise Awareness	• The American College of Physicians Foundation video was overwhelmingly well-received as a motivator that really resonated with all staff. • Many practices used the PowerPoint presentation and sometimes included it with the video. They liked its versatility, using slides to create bulletin boards or self-study projects.
Tools to Improve Spoken Communication	
Tool 4: Tips for Communicating Clearly	• Many practices were initially drawn to this tool, but when implementing it they often focused on one aspect such as teach-back or Ask Me Three.
Tool 5: The Teach-Back Method	• Practices commented that a video of someone doing teach-back would help providers to better visualize how to incorporate this technique. • Practices noted that it took some time to learn this technique and how to appropriately ask patients to teach-back without appearing to quiz the patient. Most thought that, once learned, it would not take any more time out of their day. Others noted that doing teach-back on patients who were very low literate, had English as a second language, or were receiving a complicated management plan was more difficult and therefore they avoided it. • The teach-back self-evaluation form was found useful by half the practices and noted to be not very helpful by the others. • One practice commented that a mentoring program for this skill may be helpful.
Tool 6: Follow-up with Patients	• A practice composed of all volunteers stated it was not feasible to provide follow-up due to staff structure and patients who do not have phones. • Another practice interpreted this as community outreach rather than individual patient follow-up.
Tool 7: Telephone Considerations	• Practices realized they did not know what was on their message machine and appreciated the reminder to take note of it and revise if needed.
Tool 8: Brown Bag Medication Review	• All practices that implemented this tool found medication-taking discrepancies and felt this was very worthwhile. • The challenge for practices was getting patients to bring in their medications and finding the time to do the review.

Tool Name	Key findings when testing these tools
Tool 9: How to Address Cultural and Language Differences	• Financing these efforts seemed to be the biggest challenge. With practices that had limited interpreter services, trying to coordinate them with patient needs was challenging.
Tool 10: Culture and Other Considerations	• Practices felt that being sensitive to cultures and customs was difficult to teach, and the most sensitive providers were ones with firsthand experience in different cultures.
Tools to Improve Written Communication	
Tool 11: Design Easy-to-Read Material	• Many practices preferred to collect patient information verbally rather than using a form; therefore, they did not see this as useful. • This tool was avoided because practices felt there were too many hurdles in introducing new information collection forms. • The scope of this tool was broadened to include strategies for developing and assessing forms and health education materials.
Tool 12: Use Health Education Material Effectively	• This tool was avoided because practices felt it would take too long to implement. • Practices indicated that practitioners felt using health education material would add to their day. • The scope of this tool was changed to focus on using health materials rather than developing them (see Tool 11).
Tool 13: Making Your Practice Easy to Navigate	• Practices suggested combining tools 13 and 14.
Tool 14: Creating a Welcoming Front Desk and Lobby Area	• Practices felt this was an easy tool to accomplish, commenting that this tool should be suggested as an easy one to implement.
Tools to Improve Self-Management and Empowerment	
Tool 15: Encourage Questions	• This tool went well with tools 4 and 5 • The Ask Me 3 program was viewed as time consuming, but they thought the three questions were good for structuring a provider's visit.
Tool 16: Make Action Plans	• Patients seemed to respond positively to this tool in all the testing. • Providers liked the idea of an action plan. They initially saw it as taking more time but felt it would work more smoothly once they practiced it with a few patients.
Tool 17: Improve Medication Adherence and Accuracy	• Practices saw the benefit in this, although they realized that producing graphic medication cards took more time than they could afford. They were able to revise their current electronic medical record system to create medication lists.
Tool 18: Get Patient Feedback	• The 55 questions in the CAHPS questionnaire was viewed as too many, but practices were willing to incorporate some of those questions into their current surveys.
Tools to Improve Supportive Systems	
Tool 19: Link Patients to Non-Medical Support	• Most practices acknowledged the need for a resource manual. Some had one but it was outdated. Others had a social worker or staff member who performed these types of duties. • Practices took the effort to work on their resource manuals but did not seem to adjust their referral sheet to make sure that all patients could understand it.
Tool 20: Medication Resources	• No practices in either round of testing chose to test this tool.

Tool Name	Key findings when testing these tools
Tool 21: Using Health Resources in Your Community	• Practices suggested combining these two tools
Tool 22: Use Literacy Resources in Your Community	• Practices positively received the idea of linking patients up to literacy resources and, when executed, were surprised that patients received the suggestion well.

Table 3

Key Findings from Prototype Toolkit Testing

Overall Key Findings when Testing the Entire Toolkit
Getting practices started
• Practices felt that getting started with the toolkit was the hardest part.
• The six-minute video really seemed to energize and motivate the practices.
Key elements to success
• Even if a practice had an enthusiastic champion, if that practice did not form a team, no change occurred.
• Raising awareness with the whole team and staff was often recognized as key.
• The practice assessment was also crucial in energizing the team, and steering them to their weaknesses and the tools that would help.
Other observations to note
• Prior knowledge of change models and the PDSA cycle helped practices to make change.
• Implementing five tools in two months was too much and overwhelming. It seemed that implementing one or two at a time would be more manageable.
• Practices did not read the tools thoroughly. They tended to skim them, getting some high points but missing some important details.
• Implementation was harder for practices that had a lot of part-time employees or relied on many volunteers.
• Practices struggled with how to continue to train newcomers and keep up this work in the future.
Helpful suggestions
• Many practices commented that having the toolkit accredited for continuing education credits would be very helpful.