



The Guide to Improving Patient Safety in Primary Care Settings by Engaging Patients and Families

Prepared for:

Agency for Healthcare Research and Quality
5600 Fishers Lane
Rockville, MD 20857
www.ahrq.gov

The Guide was developed for the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services. Led by the MedStar Health Research Institute, the project team included Project Patient Care, the MedStar Institute for Quality and Safety, the Clinical Directors Network, Consumers Advancing Patient Safety, the Iowa Healthcare Collaborative, the Prince George's County Department of Health, and Telligen Quality Innovation Network-Quality Improvement Organization.

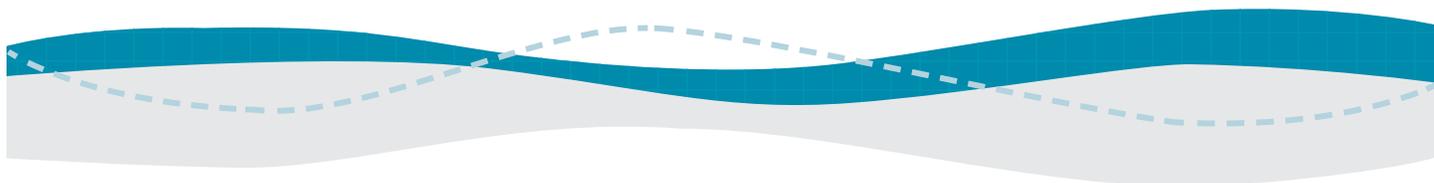
April 2018



This page is intentionally blank.

Contents

| | |
|---|----|
| Introduction..... | 1 |
| Finding Time To Engage Patients | 2 |
| Patient and Family Engagement Strategies..... | 3 |
| Be Prepared To be Engaged..... | 4 |
| Create a Safe Medicine List Together | 5 |
| Teach-Back..... | 7 |
| Warm Handoff Plus..... | 9 |
| Implementation | 10 |
| Step 1. Identify a Practice Champion and Secure Leadership Support | 10 |
| Step 2. Select the Strategies To Implement | 11 |
| Step 3. Plan Your Implementation Process..... | 11 |
| Step 4. Design Your Implementation..... | 12 |
| Step 5. Make Patients and Family Members Aware of the Changes | 12 |
| Step 6: Evaluate Implementation Effectiveness..... | 13 |
| Additional Resources..... | 14 |
| References | 16 |
| Infographic References..... | 18 |
| Appendix A – Be Prepared To Be Engaged Implementation Guidance | 19 |
| Appendix B – Create a Safe Medicine List Together Implementation Guidance | 22 |
| Appendix C – Teach-Back Implementation Guidance..... | 26 |
| Appendix D – Warm Handoff Plus Implementation Guidance | 28 |



This page is intentionally blank.

Introduction

The *Guide to Improving Patient Safety in Primary Care Settings by Engaging Patients and Families* (the Guide) is a resource to help primary care practices partner with patients and their families to improve patient safety. The Guide includes materials and resources to help primary care practices implement patient and family engagement to improve patient safety.

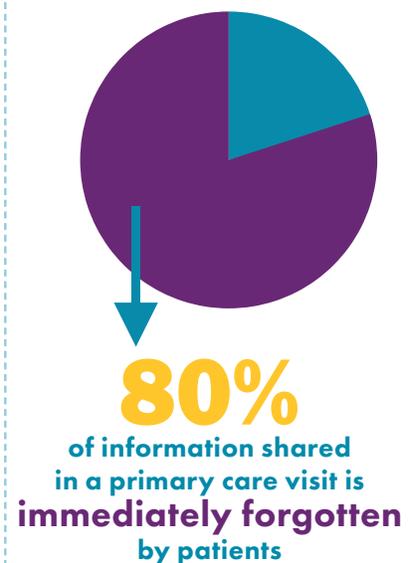
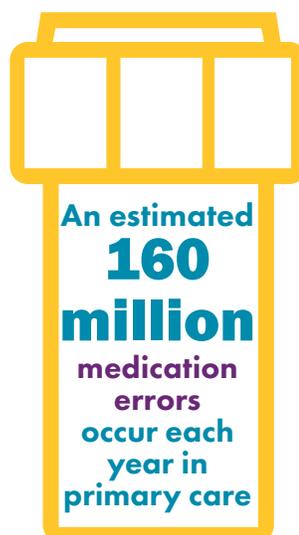
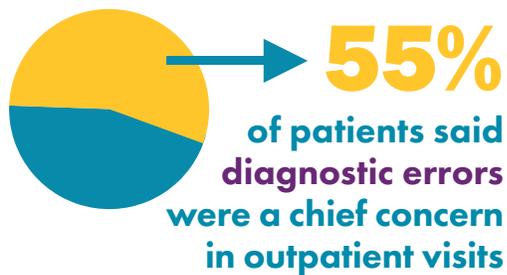
Breakdowns in patient safety in primary care are real (Figure 1). An environmental scan (<https://www.ahrq.gov/professionals/quality-patient-safety/patient-family-engagement/pfeprimarycare/envscan.html>)¹ on the topic identified several key threats to patient safety amenable to improvement through patient and family engagement. These included:

- **Errors in Diagnosis**, defined as “the failure to (a) establish an accurate and timely explanation of the patient’s health problem(s) or (b) communicate that explanation to the patient.”²
- Breakdowns in **Communication** occurring within the practice, including incomplete and ineffective communication with patients and families, failure to communicate test and laboratory results, and within team communication.
- **Medication Errors**, including failures in communicating, prescribing, filling, and dispensing, as well as patient misuse of medications.^{3,4}
- **Fragmentation of Care** resulting from patient transitions across care settings (acute and primary care) and between outpatient care team members.

Figure 1. Breakdowns in Patient Safety Within Primary Care Settings

Annually,

1 in 20 outpatients experiences a diagnostic error



In primary care, the relationship between the clinician and the patient is a key to high quality, safe, and effective healthcare. Patient and family engagement in primary care helps to forge trusting relationships that promote safety (Figure 2).

Evidence-based strategies to improve patient safety by engaging patients and families are integral to enhancing your organization's mission. The four strategies within this Guide support patient safety by engaging patients and families in closed-loop and collaborative communication within the primary care visit. Engaging patients and families in safe medicine practices is also a key feature of this Guide. Safe medicine practices begin with a complete and accurate medicine list.

Figure 2. Guide Strategies Aimed at Improving Patient Safety by Engaging Patients and Families

Improve patient safety by engaging patients and families.



Reduce errors and improve visit efficiency by setting the visit agenda together with **Be Prepared To Be Engaged.**



Encourage safe medicine practices by **Creating a Safe Medicine List Together.**



Improve communication and health literacy through **Teach-Back.**



Support collaborative communication using the **Warm Handoff Plus.**

Finding Time To Engage Patients



When primary care practices are asked about the biggest threats to patient safety in primary care, they frequently answer “*not enough time.*” They lack time for the patient encounter, time to dedicate to quality improvement, and time to manage all the competing pressures within the practice.

Patient and family engagement within primary care will take more time at first. Balancing the practice's and clinicians' needs with those of patients and their families is a challenge to delivering high-quality, safe, and effective patient-centered healthcare. Guidance is provided on how practices have overcome time pressures and successfully engaged patients and improved safety.

Patient and Family Engagement Strategies

This Guide is composed of four evidence-based strategies (Figure 3) that promote meaningful engagement with patients and families in ways that improve safety.

Figure 3. Evidence-Based Strategies To Engage Patients and Families To Improve Patient Safety



Each strategy contains practical materials to support adoption of the intervention within primary care practices. These items include strategy-specific implementation and evaluation guidance, training materials and job aids, and patient-facing materials.

Implementation and evaluation guidance at the practice level and a job aid to help select the right intervention or interventions for your practice are also provided.



Be Prepared To be Engaged

What Is Be Prepared To Be Engaged?

The Be Prepared To Be Engaged strategy encourages patients and their families to prepare for and become more fully engaged in their medical appointments.

The goal is to help patients and families set their visit agenda and to *be ready, speak up, and ask questions*. With the Be Prepared strategy, you provide patients with a Be Prepared Note Sheet and encourage them to write down what they want to talk about, their questions, and their health goals. This helps set the visit agenda and ensure that patients' questions are answered.

Why Use Be Prepared To Be Engaged?

Research found that when patients wrote down an agenda before their primary care visit, 74 percent of clinicians and 79 percent of patients agreed that communication during the visit improved.⁵ More than 80 percent of the clinicians in the study wanted patients to continue to write down an agenda.^{6,7}

How Do We Implement Be Prepared To Be Engaged?

Understanding a patient's concerns and priorities is key to a safe primary care visit. The strategy contains several materials to support your implementation planning, adoption, and evaluation. Detailed implementation guidance is provided in [Appendix A](#).

Does Be Prepared Take Time?



Patients often arrive at a primary care visit unprepared to discuss their concerns and questions, adding to the time pressures clinicians and practice staff feel. Patients often forget the questions they meant to ask or topics they hoped to discuss. When patients and their families are well prepared for primary care visits, visit time is used more effectively and information exchange improves.

"The Note Sheet helps to decrease the number of calls after the visit for things patients forgot to mention during their appointment, and significantly reduces the number of questions at the end of the visit, 'door knob questions.' Everyone wins – patients get their questions and concerns addressed at the start of the visit, and clinicians make the visit efficient."

—Primary Care Physician



Create a Safe Medicine List Together

What Is Create a Safe Medicine List Together?

The Create a Safe Medicine List Together strategy is an effort to engage patients and families to actively participate in developing a complete and accurate medicine list. Patients are asked to bring in all the medicines they take, both prescribed and over-the-counter, including non-oral medications such as injections, inhalers, ointments, and drops, as well as medicines they only take occasionally. Staff within your practice will work with patients and their families to develop a complete and accurate medicine list, and clinicians will conduct medication reconciliation based on the complete and accurate list.

Why Use Create a Safe Medicine List Together?

Medication errors are common patient safety incidents in primary care, with rates ranging between 1 and 90 out of every 100 prescriptions.^{3,8} Medication safety issues include prescribing errors, contraindications, overprescribing, underprescribing, and patient adherence.

According to the Centers for Disease Control and Prevention, more than three-quarters of physician office visits involve drug therapy, with 3.2 billion medicines provided each year.⁹ Prescribing errors occur in 5 to 7 percent of prescriptions.^{3,10,11} That is at least *160 million medication prescribing errors annually*.

Almost half the people in the United States have used at least one prescription in the last 30 days, while one in five has used at least three.⁹ More than half of the medicines prescribed to patients taking five or more medicines are not needed, are contraindicated, or are not taken as prescribed.¹²

How Do We Implement Create a Safe Medicine List Together?

Medication safety in primary care requires a team approach, engaging the patient and his or her family as part of that team. Creating a medicine list together can help uncover medicine issues such as patients who are unintentionally overdosing by taking both the generic and name brand medicines, are taking outdated prescriptions, or are taking supplements that negatively interact with their prescription medicines.

At least once per year, ask the patient to bring in all of his or her medicines to create a safe medicine list together. Detailed implementation guidance is provided in [Appendix B](#).

“A lot of times patients come in and say, ‘I take a white pill or I take a purple pill or a green pill’ and I have no idea what it is or how much they are taking. This strategy helps to improve documentation because we can see the medications and decrease medication errors. Everyone – providers, nurses, patients – now knows what the patient is taking, the dose, how, and why.”

—Primary Care Physician

Does Creating a Safe Medicine List Together Take Time?



Creating a safe medicine list together will take more time. However, by ensuring you have a complete and accurate understanding of the medicines your patients are taking, you will be able to better manage their health and reduce the chances of adverse drug events, emergency department visits, and hospitalizations. Engaging the team to support the process can allow clinicians to focus on complex challenges of adherence and medication health literacy.



Teach-Back

What Is Teach-Back?

Teach-back is an evidence-based health literacy intervention that promotes patient engagement, patient safety, adherence, and quality. The goal of teach-back is to ensure that you have explained information clearly so that patients and their families understand.

In teach-back, you ask patients or family members to explain *in their own words* what they need to know or do. It is more than repeating what they heard. You ask them to **teach it back** because you do not know if they understood if they simply repeat your own words back to you. Teach-back is a strategy for you to validate that you have explained information clearly and that patients and family members clearly understand what you have told them.

Why Use Teach-Back?

Research indicates that clinicians underestimate their patients' needs for information and overestimate their ability to communicate effectively with patients.¹³⁻¹⁵ In one study, up to 80 percent of the medical information patients were told during office visits was forgotten immediately;¹⁶ in another study, nearly half of the information retained was incorrect.¹⁷

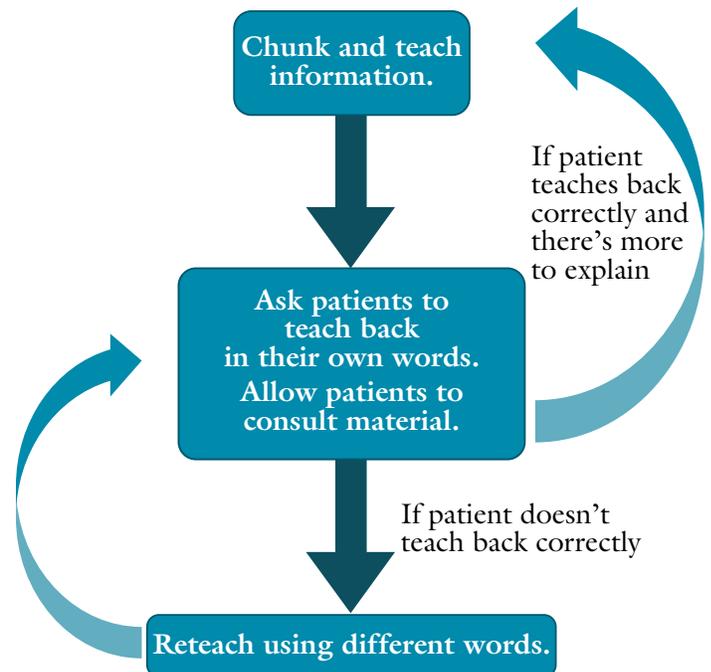
Patient misunderstandings and poor recall contribute to poor patient adherence and outcomes.^{16,18} Teach-back is a proven strategy to ensure patients and their families clearly understand information you communicate to them. Finding ways to improve communication between you and your patients and their families can directly address patient safety problems.

How Do We Implement Teach-Back?

Teach-back is most helpful when introducing a new concept or new instruction, such as a new diagnosis, new medication, new device (e.g., inhaler), or new home care instruction. Detailed implementation guidance is provided in [Appendix C](#).

"I've been doing this [primary care] for a long time and didn't realize a lot of things are not heard. Teach-back is a wonderful idea; we think we're getting our message across and obviously, we are not."

—Primary Care Physician



Does Teach-Back Take Time?



While teach-back may take more time in the beginning, clinicians who use teach-back find that taking an extra few minutes during the visit to make sure the patient understands often eliminates phone calls or emails from that patient a day or two later asking for clarity.



Warm Handoff Plus

What Is a Warm Handoff Plus?

A Warm Handoff Plus is a handoff conducted in person, between two members of the healthcare team, in front of the patient (and family if present). It includes the patient as a team member so that he or she can hear what is being discussed about the clinical problem, current status, and plan of care.

The emphasis of the Warm Handoff Plus is specifically on engaging the patient and family in the handoff within the primary care practice. A Warm Handoff Plus can occur between any two members of the healthcare team, including clinicians, medical assistants, front and back office staff, and members of the extended care team, such as pharmacist, diabetes nurse educator, or social worker.

Why Use a Warm Handoff Plus?

A Warm Handoff Plus engages the patient and is a safety check. Communication breakdowns within the healthcare team or between the team and the patient or family can result in medical errors.



Research demonstrates that reliable and effective communication is essential for patient safety and improved clinical outcomes. In addition, collaborative communication (promoted by the Warm Handoff Plus) helps to build trust and strengthen relationships, resulting in improved communication, patient outcomes, and patient and clinician satisfaction.^{19,20}

How Do We Implement a Warm Handoff Plus?

When implementing a Warm Handoff Plus, start small. Try it with one or two within-practice transitions to start, or alternatively, try it with the first and last patients of each day. Detailed implementation guidance is provided in [Appendix D](#).

Does the Warm Handoff Plus Take Time?



The Warm Handoff Plus may take more time in the beginning. Prioritizing certain patients, such as those with abnormal labs or other critical test results, can help address the time challenges. Over time and with consistent application of the Warm Handoff Plus and enhanced patient-centered team communication, the strategy should improve clinician, staff, and patient satisfaction with the visit.

“Sometimes during a warm handoff things will come up where the provider will say something and then all of a sudden the patient says, ‘Well, no, it is really, ...’ It makes it a lot easier in that you don’t have to re-hash and ask all the same questions to the patient. You can ask more specific questions.”

—Medical Assistant

Implementation

Implementing the strategies will be like any quality or process improvement project. It requires commitment, leadership, and planning. The Agency for Healthcare Research and Quality provides tips for facilitating the quality improvement (QI) process in its Ambulatory Care Improvement Guide.

Three Tips for Facilitating the Quality Improvement Process

1. **Place a priority on encouraging communication, engagement, and participation** for all stakeholders affected by the QI process. Learn what is most important to the people within your primary care practice (e.g., leaders, patients, clinicians) and look for ways to help them embrace the changes and begin to take ownership of them.
2. **Start your implementation of improvements with small-scale demonstrations**, which are easier to manage than large-scale changes. Small-scale demonstrations or small tests of change also allow you to refine the new processes, demonstrate their impact on practices and outcomes, and build increased support by stakeholders.
3. **Keep in mind and remind others that QI is an iterative process.** You will be making frequent corrections along the way as you learn from experience with each step and identify other actions to add to your strategy.



For more guidance, refer to section 4 of the Ambulatory Care Quality Improvement Guide at <https://www.ahrq.gov/cahps/quality-improvement/improvement-guide/4-approach-qi-process/index.html>.

This section outlines the broad steps of implementation and recommends ways to evaluate success.

Step 1. Identify a Practice Champion and Secure Leadership Support

Strong leadership and staff engagement are important to any successful process improvement program.

Identify a practice champion

A practice champion is needed who can lead the implementation efforts. The practice champion should be dynamic and respected. The champion must work on team building and provide technical support for implementing the strategies. You may want to identify champions from both the administrative and clinical staff to encourage active engagement from all perspectives.

In addition, consider identifying a patient champion. If you have a Patient and Family Advisory Committee (PFAC), consider engaging the PFAC to participate in your implementation.

Secure leadership support

Strong leadership support is important to any successful patient safety improvement activity. Practice champions should orient leadership to:

- The scope of the problem of patient safety in primary care in general and the practice specifically.
- Available strategies to overcome patient safety challenges.

An infographic (https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/patient-family-engagement/pfeprimarycare/infographicposter-final508_0.pdf) is available for the practice champion to use when seeking leadership support.

Step 2. Select the Strategies To Implement

Review the Guide strategies and select the strategy or strategies that address key patient safety threats for your practice:

- Select **Be Prepared To Be Engaged** if you want to ensure that your patients ask you any questions they have and communicate their concerns and health goals to you. This strategy can help make office visits more efficient and reduce followup calls.
- Select **Create a Safe Medicine List Together** if you have many patients with multiple medications or you have committed to helping patients with medication management. This strategy can help you conduct medication reconciliation based on a complete and accurate list of medications, meet national patient safety goals, and achieve improved patient outcomes.
- Select **Teach-Back** if you want to ensure that your patients understand what you tell them, including instructions such as how to take care of themselves at home, how to take their medications, how to use devices, and what additional procedures or care they need. This strategy can help ensure your patients leave your office knowing what they need to know and do.
- Select **Warm Handoff Plus** if you have handoffs within your practice, but they are currently done via the electronic health record or a paper note. This strategy can help improve communication between team members and with the patient and family.

Practice change can be challenging, so it is unrealistic to adopt multiple strategies at one time. Select the strategies that will best address your safety challenges, in the order that makes the most sense for your practice. Small tests of change and serial implementation of the strategies has been most effective for successful and sustained implementation.

Step 3. Plan Your Implementation Process

Once you have identified and prioritized the strategies for implementation, the next step is designing and planning a successful implementation process:

- **Identify your team.** Even the strongest practice champions cannot do it alone. A small multidisciplinary team can help the practice champion make important decisions about strategies, timeline, and evaluation metrics.

- **Set a reasonable timeline.** Successfully implementing a sustainable practice improvement takes dedication and time. Multiple strategies should not be implemented at the same time. Each strategy should be implemented for at least 3 months before starting the next implementation. This approach will give the practice time to deploy the intervention and evaluate progress without distraction.

Allow flexibility for more complex changes that may require staff retraining. More complex strategies, such as the Warm Handoff Plus, may require longer implementation and adoption cycles than simpler strategies.

- **Determine a standardized implementation process.** There is no one best approach to planning, implementing, and evaluating quality improvement strategies. If you already have an established approach for practice improvements, use this approach.

A widely used approach for process improvement planning is the Model for Improvement.²¹ This approach seeks to accelerate change improvement efforts through a series of Plan-Do-Study-Act (PDSA) cycles. Each rotation of the cycle results in improvements to the process, and each revision of the process requires additional measurement and evaluation.

Step 4. Design Your Implementation

The practice champion will lead the implementation team through the process of designing the implementation of the selected strategies.

Use the Implementation Quick Start Guides. Each strategy has implementation guidance specific to that strategy within the Implementation Quick Start Guide. These Quick Start Guides are meant as the starting point for your implementation and should help you plan your strategy for adopting each intervention. Appendixes A, B, C, and D provide additional strategy-specific implementation guidance.

Step 5. Make Patients and Family Members Aware of the Changes

Inform patients and their families about what the practice is implementing and what the patients' and families' roles are in the process. Empowering everyone at the practice to engage with patients about the strategy will reinforce to patients the importance of the strategy.

If you have a patient portal, you may want to make patient-facing materials available on the portal. Once patients and families are made aware of a strategy, it is important for staff and clinicians to use the strategy. Setting and then not meeting patient expectations can be worse for patient engagement than not implementing the strategies.

Step 6: Evaluate Implementation Effectiveness

Recognize your team's efforts and successes

Talk about progress every chance you get. Tell success stories about using the intervention. Celebrate clinician and practice staff wins and publicly recognize efforts to improve patient safety. Ensure that the success of the interventions is seen in every aspect of your practice to help the changes gain solid footing.

Establish evaluation measures

There are several things to consider when selecting measurements to assess the effectiveness of any process improvement implementation:

- **Identify stakeholders and their data needs.** This group includes internal stakeholders (e.g., patients, clinicians, practice staff, administrators, and leaders) and external stakeholders (e.g., payers, regulators). Ideally, you should select evaluation measures that meet the information needs of both internal and external stakeholder groups.
- **Identify strategy-specific outcomes and implementation processes.** Establish strategy-specific measures on both outcomes and processes to examine implementation success. These measures are often obtained through observation and self-report. The process-related measures should focus on whether the implementation was successful and *how* and *why* the implementation was successful (or not). Examples are provided in the individual Implementation Quick Start Guides.
- **Identify global patient safety and patient and family engagement outcomes.** These may include measures of patient safety or patient and family engagement tracked over time. These would be conducted less regularly than process implementation measures. Be sure to conduct a baseline evaluation of your global outcome measures to fully assess the impact of your practice changes. Examples are discussed below.

Monitor the impact of patient safety and patient engagement activities

Several surveys can assist office practices in monitoring the impact of patient safety and patient engagement activities at the practice level. The surveys and measures provided here are recommendations. You should select the measures that best reflect your implementation and practice environment.

- **AHRQ Medical Office Survey on Patient Safety Culture.** This AHRQ-sponsored survey is designed specifically for outpatient medical office providers and staff and asks for opinions about the culture of patient safety and healthcare quality in medical offices. <https://www.ahrq.gov/professionals/quality-patient-safety/patientsafetyculture/medical-office/index.html>
- **Clinician & Group Consumer Assessment of Healthcare Providers and Systems (CG-CAHPS).** This survey assesses patients' experiences with healthcare providers and staff in doctors' offices. <http://www.ahrq.gov/cahps/surveys-guidance/cg/index.html>

- **CG-CAHPS Health Literacy Item Sets.** The CAHPS Health Literacy Item Sets focus on assessing providers' activities to foster and improve patients' health literacy. Health literacy is commonly defined as patients' ability to obtain, process, and understand the basic health information and services they need to make appropriate health decisions. While health literacy depends in part on individuals' skills, it also depends on the complexity of health information and how it is communicated.
<https://www.ahrq.gov/cahps/surveys-guidance/item-sets/literacy/index.html>
- **Patient measures of patient safety.** Recently, several new measures of patient safety from the patient's perspective have been developed. These include:
 - Primary Care Patient Measure of Safety (PC PMOS), discussed in an article in *BMJ Quality & Safety* at <http://qualitysafety.bmj.com/content/25/4/273>.
 - Patient Reported Experiences and Outcomes of Safety in Primary Care (PREOS-PC), discussed in an article in *Annals of Family Medicine* at <http://www.annfammed.org/content/14/3/253.full>.
 - Patient Experience Assessment, part of the guide *Improving Your Laboratory Testing Process*, available at <https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/quality-resources/tools/lab-testing/lab-testing-toolkit.pdf>.

Additional Resources

Case Studies

Four case studies of exemplar practices from across the country were developed. These are successful examples of engaging patients and families to improve patient safety.

- **OpenNotes®:** OpenNotes® is a tool that gives patients access to their medical records so they can read encounter notes. Patients can access their notes online through the patient portal or in hard copy from a printout.
- **Patient and Family Advisory Committee:** A Patient and Family Advisory Committee (PFAC) is a group of patients, family members, office staff, and primary care providers working together to improve safety, quality, and the patient experience.
- **Team-Based Care:** Team-based care is a transformative method of delivering care that emphasizes teamwork. In addition to the patient and family, the care team may include a doctor or nurse practitioner, registered nurse, care team coordinator, scheduler, and even pharmacist or social worker.
- **Shared Decision Making:** Shared decision making is a way for patients to work with their care teams to make decisions about their healthcare. The goal is for the patient and family to better understand the care and treatment options, so they can select the care plan that is best for the patient.

Each case study provides an overview of the program, implementation guidance, and contact information. The full case studies and one-page summaries for patients and clinicians can be retrieved from the Agency for Healthcare Research and Quality website (<https://www.ahrq.gov/professionals/quality-patient-safety/patient-family-engagement/pfeprimarycare/casestudies.html>).

Resources for Advanced Practices

Many additional strategies have the potential to improve patient safety in primary care settings by engaging patients and families. However, these strategies may be more complicated and require technical assistance to adopt. More advanced practices, such as those practices who have already adopted the strategies detailed in this Guide, may consider adopting the additional strategies to further their patient safety improvement journey. The Resources for Advanced Practices can be downloaded from the Agency for Healthcare Research and Quality website (https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/patient-family-engagement/pfeprimarycare/advancedpractice-guide_final508.pdf).

Frequently Asked Questions

A Frequently Asked Questions (FAQ) web page has been established to aid primary care practices and practice champions during their implementation. The questions were frequently asked by the practices that field tested the strategies in this Guide. The Frequently Asked Questions can be reviewed on the Agency for Healthcare Research and Quality website (<https://www.ahrq.gov/professionals/quality-patient-safety/patient-family-engagement/pfeprimarycare/faq.html>).

Original Materials

This Guide and its materials were developed over a period of 2 years during which an initial version was available to the public from October 2016 to March 2018. The original intervention materials were field tested with practices from across the United States. Feedback from the field test was used to improve the materials to enhance adoption. The original materials are available through the Agency for Healthcare Research and Quality on their project website (<https://admin.ahrq.gov/professionals/quality-patient-safety/patient-family-engagement/pfeprimarycare/interventions/index.html>).

References

1. Agency for Healthcare Research and Quality. Guide to Improving Patient Safety in Primary Care Settings by Engaging Patients and Families Environmental Scan Report. <http://www.ahrq.gov/professionals/quality-patient-safety/patient-family-engagement/pfeprimarycare/envscan.html>. Accessed March 28, 2018.
2. Improving diagnosis in health care. Report in Brief. Washington, DC: National Academy of Sciences; 2015. http://www.nationalacademies.org/hmd/~media/Files/Report%20Files/2015/Improving-Diagnosis/DiagnosticError_ReportBrief.pdf. Accessed March 28, 2018.
3. Olaniyan JO, Ghaleb M, Dhillon S, et al. Safety of medication use in primary care. *Int J Pharm Pract* 2015;23(1):3-20. [doi:10.1111/ijpp.12120](https://doi.org/10.1111/ijpp.12120). Accessed March 28, 2018.
4. Leonhardt KK, Pagel P, Bonin D, et al. Creating an accurate medication list in the outpatient setting through a patient-centered approach. In: Henriksen K, Battles JB, Keyes MA, et al., eds. *Advances in Patient Safety: New Directions and Alternative Approaches*. Vol. 3: Performance and Tools. Rockville, MD: Agency for Healthcare Research and Quality; 2008. <http://www.ncbi.nlm.nih.gov/pubmed/21249936>. Accessed March 28, 2018.
5. Anderson MO, Jackson SL, Oster NV, et al. Patients typing their own visit agendas into an electronic medical record: pilot in a safety-net clinic. *Ann Fam Med* 2017;15(2):158-61. [doi:10.1370/afm.2036](https://doi.org/10.1370/afm.2036). Accessed March 28, 2018.
6. Robinson JD, Tate A, Heritage J. Agenda-setting revisited: when and how do primary-care physicians solicit patients' additional concerns? *Patient Educ Couns* 2016;99(5):718-23. [doi:10.1016/j.pec.2015.12.009](https://doi.org/10.1016/j.pec.2015.12.009). Accessed March 28, 2018.
7. Kowalski CP, McQuillan DB, Chawla N, et al. "The hand on the doorknob": visit agenda setting by complex patients and their primary care physicians. *J Am Board Fam Med* 2018;31(1):29-37. <http://www.jabfm.org/content/31/1/29.long>. Accessed March 28, 2018.
8. Panesar SS, deSilva D, Carson-Stevens A, et al. How safe is primary care? A systematic review. *BMJ Qual Saf* 2016;25(7):544-53. [doi:10.1136/bmjqs-2015-004178](https://doi.org/10.1136/bmjqs-2015-004178). Accessed March 28, 2018.
9. FastStats - Therapeutic Drug Use. <https://www.cdc.gov/nchs/fastats/drug-use-therapeutic.htm>. Accessed March 28, 2018.
10. Avery AJ, Rodgers S, Franklin BD, et al. Research into practice: safe prescribing. *Br J Gen Pract* 2014;64(622):259-61. [doi:10.3399/bjgp14X679895](https://doi.org/10.3399/bjgp14X679895). Accessed March 28, 2018.
11. Akbarov A, Kontopantelis E, Sperrin M, et al. Primary care medication safety surveillance with integrated primary and secondary care electronic health records: a cross-sectional study. *Drug Saf* 2015;38(7):671-82. [doi:10.1007/s40264-015-0304-x](https://doi.org/10.1007/s40264-015-0304-x). Accessed March 28, 2018.

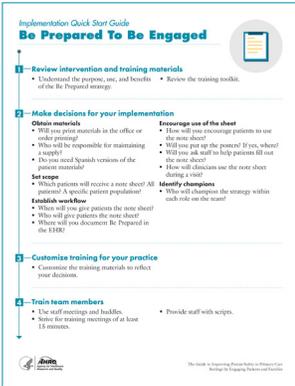
12. Koper D, Kamenski G, Flamm M, et al. Frequency of medication errors in primary care patients with polypharmacy. *Fam Pract* 2013;30(3):313-9. [doi:10.1093/fampra/cms070](https://doi.org/10.1093/fampra/cms070). Accessed March 28, 2018.
13. Calkins DR, Davis RB, Reiley P, et al. Patient-physician communication at hospital discharge and patients' understanding of the postdischarge treatment plan. *Arch Intern Med* 1997;157(9):1026. [doi:10.1001/archinte.1997.00440300148014](https://doi.org/10.1001/archinte.1997.00440300148014). Accessed March 28, 2018.
14. Hancock K, Clayton JM, Parker SM, et al. Discrepant perceptions about end-of-life communication: a systematic review. *J Pain Symptom Manage* 2007;34(2):190-200. [doi:10.1016/j.jpainsymman.2006.11.009](https://doi.org/10.1016/j.jpainsymman.2006.11.009).
15. Coran JJ, Koropeckyj-Cox T, Arnold CL. Are physicians and patients in agreement? Exploring dyadic concordance. *Health Educ Behav* 2013;40(5):603-11. [doi:10.1177/1090198112473102](https://doi.org/10.1177/1090198112473102). Accessed March 28, 2018.
16. Kessels RPC. Patients' memory for medical information. *J R Soc Med* 2003;96(5):219-22. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC539473/>. Accessed March 28, 2018.
17. Anderson JL, Dodman S, Kopelman M, et al. Patient information recall in a rheumatology clinic. *Rheumatology* 1979;18(1):18-22. [doi:10.1093/rheumatology/18.1.18](https://doi.org/10.1093/rheumatology/18.1.18). Accessed March 28, 2018.
18. Laws MB, Lee Y, Taubin T, et al. Factors associated with patient recall of key information in ambulatory specialty care visits: results of an innovative methodology. *PLoS One* 2018 Feb 1;13(2):e0191940. [doi:10.1371/journal.pone.0191940](https://doi.org/10.1371/journal.pone.0191940). Accessed March 28, 2018.
19. Toccafondi G, Albolino S, Tartaglia R, et al. The collaborative communication model for patient handover at the interface between high-acuity and low-acuity care. *BMJ Qual Saf* 2012;21 Suppl 1:i58-66. [doi:10.1136/bmjqs-2012-001178](https://doi.org/10.1136/bmjqs-2012-001178). Accessed March 28, 2018.
20. Knox L, Crosson J, Parchman ML. Primary Care Practice Facilitation Curriculum Module 30. Building Teams in Primary Care. (Prepared by Mathematica Policy Research under Contract No. HHSA2902009000191-Task Order No. 6.) Rockville, MD: Agency for Healthcare Research and Quality; September 2015. AHRQ Publication No. 15-0060-EF. <https://pcmh.ahrq.gov/sites/default/files/attachments/pcpf-module-30-teams.pdf>. Accessed March 28, 2018.
21. Institute for Healthcare Improvement. How To Improve. <http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>. Accessed March 28, 2018.

Infographic References

The following resources were used to assemble the infographic referred to above under “Secure leadership support” in Step 1 of the Implementation section.

- Akbarov A, Kontopantelis E, Sperrin M, et al. Primary care medication safety surveillance with integrated primary and secondary care electronic health records: a cross-sectional study. *Drug Saf* 2015;38(7):671-82. [doi:10.1007/s40264-015-0304-x](https://doi.org/10.1007/s40264-015-0304-x). Accessed March 28, 2018.
- Anderson JL, Dodman S, Kopelman M, Fleming A. Patient information recall in a rheumatology clinic. *Rheumatology* 1979;18(1):18-22. [doi:10.1093/rheumatology/18.1.18](https://doi.org/10.1093/rheumatology/18.1.18). Accessed March 28, 2018.
- Avery AJ, Rodgers S, Franklin BD, et al. Research into practice: safe prescribing. *Br J Gen Pract* 2014;64(622):259-61. [doi:10.3399/bjgp14X679895](https://doi.org/10.3399/bjgp14X679895). Accessed March 28, 2018.
- Coran JJ, Koropecykj-Cox T, Arnold CL. Are physicians and patients in agreement? Exploring dyadic concordance. *Health Educ Behav* 2013;40(5):603-11. [doi:10.1177/1090198112473102](https://doi.org/10.1177/1090198112473102). Accessed March 28, 2018.
- FastStats - Therapeutic Drug Use. <https://www.cdc.gov/nchs/fastats/drug-use-therapeutic.htm>. Accessed March 28, 2018.
- Improving diagnosis in health care. Report in Brief. Washington, DC: National Academy of Sciences; 2015. http://www.nationalacademies.org/hmd/~media/Files/Report%20Files/2015/Improving-Diagnosis/DiagnosticError_ReportBrief.pdf. Accessed March 28, 2018.
- Kessels RPC. Patients’ memory for medical information. *J R Soc Med* 2003;96(5):219-22. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC539473/>. Accessed March 28, 2018.
- Koper D, Kamenski G, Flamm M, et al. Frequency of medication errors in primary care patients with polypharmacy. *Fam Pract* 2013;30(3):313-9. [doi:10.1093/fampra/cms070](https://doi.org/10.1093/fampra/cms070). Accessed March 28, 2018.
- Laws MB, Lee Y, Taubin T, et al. Factors associated with patient recall of key information in ambulatory specialty care visits: results of an innovative methodology. *PLoS One*. 2018 Feb 1;13(2):e0191940. [doi:10.1371/journal.pone.0191940](https://doi.org/10.1371/journal.pone.0191940). Accessed March 28, 2018.
- Olaniyan JO, Ghaleb M, Dhillon S, et al. Safety of medication use in primary care. *Int J Pharm Pract* 2015;23(1):3-20. [doi:10.1111/ijpp.12120](https://doi.org/10.1111/ijpp.12120). Accessed March 28, 2018.
- Panesar SS, deSilva D, Carson-Stevens A, et al. How safe is primary care? A systematic review. *BMJ Qual Saf* 2016;25(7):544-53. [doi:10.1136/bmjqs-2015-004178](https://doi.org/10.1136/bmjqs-2015-004178). Accessed March 28, 2018.

Appendix A – Be Prepared To Be Engaged Implementation Guidance



To help you plan and design your Be Prepared To Be Engaged implementation, a Quick Start Guide (QSG) is available. The Be Prepared To Be Engaged QSG has six stages.

1. Review the Intervention and Training Materials

Before you implement Be Prepared To Be Engaged, the practice champion needs to understand the materials, their intended use, and strategies for success.

Be Prepared Note Sheet

The Be Prepared Note Sheet is given to patients and family members before their appointment so they can write down what they want to talk about during their appointment. It can be given to the patient and family member at check-in or during rooming so they have time to fill it in.

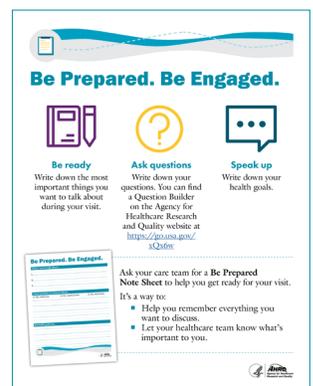
When the clinician comes into the exam room, he or she can quickly review what the patient has written. This information will help the clinician plan the visit. Sometimes it may mean asking patients to schedule an additional appointment because there will not be time to discuss both their current complaint and all their nonurgent concerns, questions, and goals.

Some considerations for using the Be Prepared Note Sheet include:

- The Be Prepared Note Sheet should be made available to each patient in the exam room or handed out during check-in.
- The practice should consider the need to have copies of the Note Sheet, clipboards, and pencils/pens available.
- The clinician can use the Note Sheet to help guide the visit and ensure the patient's goals and concerns are addressed either at this visit or in a followup visit if needed.
- The practice may need English and other language versions of the Be Prepared Note Sheet, depending on their patient population.

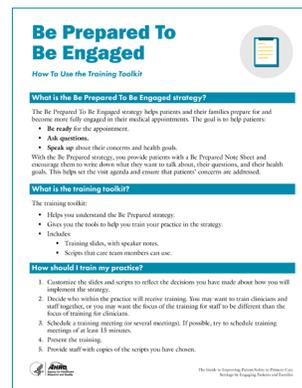
Be Prepared Patient Poster

The patient poster can be hung in an examination room or in the waiting room to help patients understand what they are being asked to do. When planning the implementation, you may want to consider including posters where they will be most visible to patients and their family members. Consider whether you will need English and other language versions of the patient poster.



Be Prepared Training Toolkit

The training toolkit provides slides, scripts to use when introducing the Be Prepared To Be Engaged Note Sheet, and a training guide (“How To Use the Training Toolkit”) to help with training and adoption. The training toolkit should be used by the practice champion and would be most successfully used in collaboration with a clinical and staff champion.



2. Make Decisions for Your Implementation

You will need to make several decisions to support the design of your Be Prepared To Be Engaged implementation. These are listed in the Quick Start Guide and include decisions on:

- How you will obtain materials,
- What the scope of your implementation will be,
- What the workflow will be in your implementation,
- How you will encourage and reinforce the use of the strategy, and
- Who will champion the implementation.

3. Customize the Training for Your Practice

The Be Prepared To Be Engaged strategy includes a training guide, slides, and scripts for you to use for team training. You will need to customize the slides and the scripts to reflect the decisions you make on how to implement the strategy in your practice.

4. Train Team Members

You should organize initial training sessions to inform staff and clinical teams of the implementation, its goals, and the processes that will be piloted during the initial adoption.

Ideally, trainings should be between 15 and 30 minutes and leverage existing meetings to minimize disruption. Make sure you have copies of the materials for everyone who is attending the training session so they can practice and feel comfortable with the strategy and how to use each material during implementation. Provide enough time to answer questions and discuss any concerns.

5. Go Live With Implementation

Once your team is trained and materials are obtained and ready to use, it is time to go live with the Be Prepared To Be Engaged strategy.

- Inform staff and clinical teams of the go live date and timelines for initial adoption and evaluation.

- Reinforce the training by using staff meetings and huddles to discuss challenges to implementation and share success stories. These discussions should be held at least weekly during the initial implementation period. This will promote the Be Prepared To Be Engaged strategy and encourage its sustained adoption.
- Identify good implementors and use them as peer coaches or mentors. Share stories of “Safety Catches” revealed through using the strategy.

6. Evaluate Your Progress

In addition to the practicewide evaluation of patient safety, it is important to select one or two evaluation measures or metrics specific to the Be Prepared To Be Engaged strategy. Examples of these are provided in the Quick Start Guide.

Appendix B – Create a Safe Medicine List Together Implementation Guidance



To help you plan and design your Create a Safe Medicine List Together implementation, a Quick Start Guide (QSG) is available. The Create a Safe Medicine List Together QSG has six stages.

1. Review the Intervention and Training Materials

Before you implement Create a Safe Medicine List Together, the practice champion needs to understand the materials, their intended use, and strategies for success.

Create a Safe Medicine List Together Patient Reminder Card

This postcard-sized reminder card provides patients with a visual cue to bring in their medicines to their next appointment.

Your practice may consider:

- Mailing the reminder card to patients 1 to 2 weeks before their scheduled appointment.
- Giving the card to patients at the end of their visit to remind them to bring their medicines to their next visit.
- Using English and other language versions of the reminder card.



Practices also found that adding a message to bring in medicines to the auto-call appointment reminder script helped encourage and reinforce the need for patients to bring in their medicines.

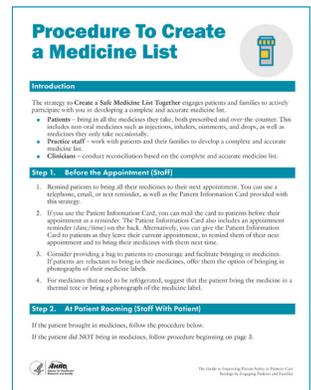
Create a Safe Medicine List Together Patient Poster

The patient poster can be hung in an examination room or in the waiting room to help patients understand what they are being asked to do. When planning the implementation, you may want to consider including posters where they will be most visible to patients and their family members. Consider whether you will need English and other language versions of the patient poster.



Procedure To Create a Medicine List

The Procedure To Create a Medicine List provides the steps to take to create a safe medicine list together. This procedure includes steps to take before the appointment, to create the medicine list if the patient has brought in the medicines, and to create the medicine list if the patient has not brought in the medicines. It also includes steps for the clinician during the appointment.



Create a Safe Medicine List Together Checklists

The Create a Safe Medicine List Together strategy has two checklists: one checklist to use when patients bring in their medicines and another checklist to use when they do not. These checklists are based on the procedure, which provides more detail if needed.

The checklists will be helpful when first adopting the intervention in practice. Once your team is comfortable with the process, they may need to use the checklists less often, but keeping them on hand attached to the computer station for quick reference may support consistent application of the strategy.



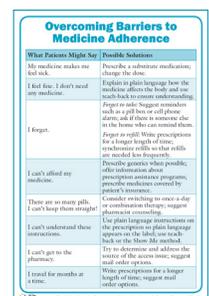
Create a Safe Medicine List Together Training Toolkit

The training toolkit provides slides, scripts to use for what to say to patients about bringing in their medicines, role play scenarios to practice the strategy, and a training guide (“How To Use the Training Toolkit”) to help with training and adoption. The training toolkit should be used by the practice champion and would be most successfully used in collaboration with a clinical and staff champion.



Overcoming Barriers to Medicine Adherence

This job aid provides some quick tips on how to overcome some of the most common barriers to medicine adherence. This tool can be used during the training as a handout and kept on hand for quick reference. It will be particularly useful during the early adoption phase of the strategy.



2. Make Decisions for Your Implementation

You will need to make several decisions to support the design of your Create a Safe Medicine List Together implementation. These are listed in the Quick Start Guide and include decisions on:

- How you will obtain materials,
- What the scope of your implementation will be,
- What the workflow will be in your implementation,
- How you will encourage and reinforce the use of the strategy, and
- Who will champion the implementation.

3. Customize the Training for Your Practice

The Create a Safe Medicine List Together strategy includes a training guide, slides, scripts, and role play scenarios for you to use for team training. You will need to customize the slides and the scripts to reflect the decisions you make on how to implement the strategy in your practice.

It is important to practice the approach to Create a Safe Medicine List Together for when patients bring in their medicines and for the cases when patients do not. This way your team members will be able to handle any scenario they are presented with.

4. Train Team Members

You should organize initial training sessions to inform staff and clinical teams of the implementation, its goals, and the processes that will be piloted during the initial adoption.

Ideally, trainings should be between 15 and 30 minutes and leverage existing meetings to minimize disruption. Make sure you have copies of the materials for everyone who is attending the training session so they can practice and feel comfortable with the strategy and how to use each material during implementation. Provide enough time to answer questions and discuss any concerns.

Practicing through role play is very important. Try to find opportunities to practice, such as staff meetings, huddles, and “Lunch & Learns.”

5. Go Live With Implementation

Once your team is trained and materials are obtained and ready to use, it is time to go live with the Create a Safe Medicine List Together strategy.

- Inform staff and clinical teams of the go live date and timelines for initial adoption and evaluation.
- Reinforce the training by using staff meetings and huddles to discuss challenges to implementation and share success stories. These discussions should be held at least weekly during the initial implementation period. This will promote the Create a Safe Medicine List Together strategy and encourage its sustained adoption.

- Identify good implementors and use them as peer coaches or mentors. Share stories of “Safety Catches” revealed through using the strategy.

6. Evaluate Your Progress

In addition to the practicewide evaluation of patient safety, it is important to select one or two evaluation measures or metrics specific to the Create a Safe Medicine List Together strategy. Examples of these are provided in the Quick Start Guide.

Appendix C – Teach-Back Implementation Guidance

To help you plan and design your Teach-Back implementation, a Quick Start Guide (QSG) is available. The Teach-Back QSG has six stages.

1. Review the Intervention and Training Materials

Before you implement teach-back, the practice champion needs to understand teach-back, its intended use, and strategies for success. Because teach-back is a communication strategy used by individual team members, the available materials are all training materials.



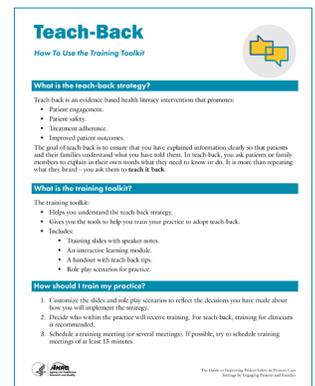
Teach-Back Interactive Module

The Teach-back interactive module is a self-directed, self-paced learning activity that provides an overview of teach-back, case presentations of how to effectively use teach-back, and information on how to address the communication needs of different patient populations using teach-back.



Teach-Back Training Toolkit

The training toolkit provides slides, role play scenarios to practice teach-back, and a training guide (“How To Use the Training Toolkit”) to help training and adoption. In addition, a Teach-Back Tips job aid can be used as a training handout. The training toolkit should be used by the practice champion and would be most successfully used in collaboration with a clinical and staff champion.



2. Make Decisions for Your Implementation

You will need to make several decisions to support the design of your teach-back implementation. These are listed in the Quick Start Guide and include decisions on the scope of your implementation, how you will document the use of teach-back, and who will champion the implementation.

3. Customize the Training for Your Practice

The teach-back strategy includes a training guide, slides, role play scenarios, an interactive learning module, and a clinician job aid for you to use for team training. You will need to customize the slides to reflect the decisions you make on how to implement the strategy in your practice.

4. Train Team Members

You should organize initial training sessions to inform staff and clinical teams of the implementation, its goals, and the processes that will be piloted during the initial adoption.

Ideally, trainings should be between 15 and 30 minutes and leverage existing meetings to minimize disruption. Allow time to engage in role play scenarios so your team can practice (or observe each other practice) and feel comfortable with the strategy. Provide enough time to answer questions and discuss any concerns.

Practicing through role play is very important. Try to find opportunities to practice, such as staff meetings, huddles, and “Lunch & Learns.”

5. Go Live With Implementation

Once your team is trained, it is time to go live with the teach-back strategy.

- Inform staff and clinical teams of the go live date and timelines for initial adoption and evaluation.
- Reinforce the training by using staff meetings and huddles to discuss challenges to implementation and share success stories. These discussions should be held at least weekly during the initial implementation period. This will promote the teach-back strategy and encourage its sustained adoption.
- Identify good implementors and use them as peer coaches or mentors. Share stories of “Safety Catches” revealed through using the strategy.

6. Evaluate Your Progress

In addition to the practicewide evaluation of patient safety, it is important to select one or two evaluation measures or metrics specific to the teach-back strategy. Examples of these are provided in the Quick Start Guide.

A publicly available assessment tool to evaluate the implementation success of teach-back is the *Conviction and Confidence Scale*. This self-assessment tool can be used by clinicians to evaluate their own use of teach-back and is available for download at <http://www.teachbacktraining.org/assets/files/PDFS/Teach%20Back%20-%20Conviction%20and%20Confidence%20Scale.pdf>. The tool can be used periodically (e.g., quarterly) initially. Once clinicians are more comfortable with the use of teach-back, it can be used less frequently (e.g., annually) as a reminder.

Appendix D – Warm Handoff Plus Implementation Guidance



To help you plan and design your Warm Handoff Plus implementation, a Quick Start Guide (QSG) is available. The Warm Handoff Plus QSG has six stages.

1. Review the Intervention and Training Materials

Before you implement Warm Handoff Plus, the practice champion needs to understand the materials, their intended use, and strategies for success.

Warm Handoff Plus Video

The Warm Handoff Plus video provides information for the practice champion, clinicians, and practice staff on a good example of a Warm Handoff Plus. Use the video during trainings to set the stage, identify opportunities for collaborative communication, and guide role plays.

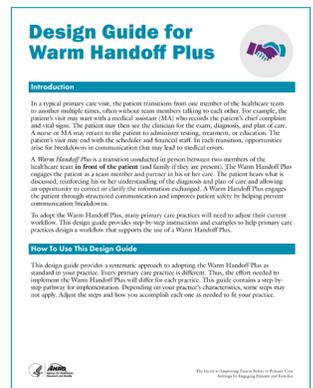


Design Guide for Warm Handoff Plus

The practice champion and the implementation team should use the Design Guide for the Warm Handoff Plus to design the practice's implementation. The Design Guide walks through key decisions the practice will need to make regarding implementation.

Key decisions include:

- Identifying which handoffs or transitions within the practice may be amenable to integration of the patient and family as a team member;
- Determining how to redesign current workflow to accommodate the strategy; and
- Identifying considerations for phasing in Warm Handoff Plus.

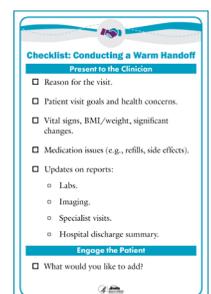


The Design Guide is a key document to help support implementation planning and success.

Checklist for Conducting a Warm Handoff Plus

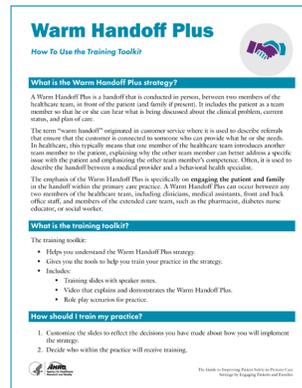
The checklist for conducting a Warm Handoff Plus provides clinicians and practice staff with guidance to support structured communication when a medical assistant, patient and family member, and clinician are in the exam room together.

The checklist will be helpful when first adopting the intervention in practice. Once your team is comfortable with the process, they may need to use the checklist less often, but keeping it on hand attached to the computer station for quick reference may support consistent application of the strategy.



Warm Handoff Plus Training Toolkit

The training toolkit provides slides, role play scenarios, and a training guide (“How To Use the Training Toolkit”) to help support training and adoption. The training toolkit should be used by the practice champion and would be most successfully used in collaboration with a clinical and staff champion.



2. Make Decisions for Your Implementation

You will need to make several decisions to support the design of your Warm Handoff Plus implementation. These are listed in the Quick Start Guide and include decisions on:

- How you will obtain materials,
- What the scope of your implementation will be,
- What the workflow will be in your implementation,
- How you will encourage and reinforce the use of the strategy, and
- Who will champion the implementation.

3. Customize the Training for Your Practice

The Warm Handoff Plus strategy includes a training guide, slides, and scripts for you to use for team training. You will need to customize the slides and the scripts to reflect the decisions you make on how to implement the strategy in your practice.

4. Train Team Members

You should organize initial training sessions to inform staff and clinical teams of the implementation, its goals, and the processes that will be piloted during the initial adoption.

Ideally, trainings should be between 15 and 30 minutes and leverage existing meetings to minimize disruption. Make sure you have copies of the materials for everyone who is attending the training session so they can practice and feel comfortable with the strategy and how to use each material during implementation. Provide enough time to answer questions and discuss any concerns.

Practicing through role play is very important. Try to find opportunities to practice, such as staff meetings, huddles, and “Lunch & Learns.”

5. Go Live With Implementation

Once your team is trained and materials are obtained and ready to use, it is time to go live with the Warm Handoff Plus strategy.

- Inform staff and clinical teams of the go live date and timelines for initial adoption and evaluation.
- Reinforce the training by using staff meetings and huddles to discuss challenges to implementation and share success stories. These discussions should be held at least weekly during the initial implementation period. This will promote the Warm Handoff Plus strategy and encourage its sustained adoption.
- Identify good implementors and use them as peer coaches or mentors. Share stories of “Safety Catches” revealed through using the strategy.

6. Evaluate Your Progress

In addition to the practicewide evaluation of patient safety, it is important to select one or two evaluation measures or metrics specific to the Warm Handoff Plus strategy. Examples of these are provided in the Quick Start Guide.

This page is intentionally blank.

