Improving Outcomes for Patients With Chronic Disease:
The Medication Adherence Project (MAP)

Toolkit and Training Guide for Primary Care Providers and Pharmacists

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If you have feedback or would like to share with us your experience implementing the MAP training in your site, please email us at CVDCDB@health.nyc.gov.

Table of Contents

Preface

Preface:
Why Medication Adherence?

From 2007 to 2009, the Medication Adherence Project (MAP) was developed and implemented by the New York City (NYC) Department of Health and Mental Hygiene (DOHMH), with help from the Fund for Public Health in New York (FPHNY). The project responded to the needs of clinicians and pharmacists working in busy primary care practices serving patient populations affected by multiple chronic diseases.

Previous Quality Improvement work by the DOHMH in clinical settings identified a lack of practical tools and training to help clinicians communicate effectively with their patients about medication adherence. MAP's needs assessments found that clinicians identified poor medication adherence as one of the greatest barriers to achieving optimal outcomes in their patients with chronic disease. Health care providers felt unprepared to help their patients address medication adherence in clinical encounters. Many indicated a lack of resources and training opportunities.

To address these problems, MAP developed and implemented a training course and toolkit to help health care teams and pharmacists engage patients in efficient and productive conversations about medicine-taking. MAP conducted an extensive literature review to find successful adherence strategies and then adapted them to the unique demands of busy urban health care settings. An innovative curriculum and practical clinical tools were then piloted, evaluated, and implemented for NYC-based clinicians.

MAP conducted trainings for physicians, nurses, pharmacists, medical assistants, patient care associates, nutritionists, social workers, and health educators (referred to as "providers" throughout the guide). Evaluation data were collected via anonymous, self-reported surveys and focus groups. Verbal and written feedback from MAP participants was collected during in-person and Web-based training sessions. Data were compiled and analyzed on a rolling basis during 2008-2009, which allowed program staff to refine and improve the tools and training with each successive cycle.

The guidance, tools, and helpful hints offered in this final training guide represent the culmination of three years of experience with NYC health care professionals. These practical tools should prove useful to health care providers and staff who work with patients with chronic disease in various ambulatory care settings, within and beyond NYC.

Introduction:
How to Use the MAP Training Package

The **MAP training package** serves as a practical, stand-alone toolkit and training guide for health care professionals working in busy, under-resourced ambulatory care settings.

MAP's objectives:

1) To familiarize health care professionals with common barriers to medication adherence faced by patients with chronic disease;

2) To provide evidence-based solutions to improving adherence;

3) To train health care professionals to engage patients in conversations about medicine-taking;

4) To assist health care professionals to integrate MAP tools into their sites, using strategies and tools based on Quality Improvement methodologies; and

5) To assist health care professionals to train their colleagues to use the MAP tools and techniques effectively.

MAP's intended audience is the entire primary care team, including pharmacists. Unless otherwise specified, we will refer to the following professionals collectively as "providers":

- Physicians (MDs, DOs)
- Physician assistants (PAs)
- Nurse practitioners (NPs)
- Registered nurses (RNs)
- Licensed Practical nurses (LPNs)
- Medical assistants (MAs)
- Patient care associates (PCAs)
- Pharmacists
- Health center administrative staff

This package contains the following components:

1) **Clinical tools:**

- **"Questions to Ask"** tear-off pad to be distributed at the front desk of the health center or pharmacy to encourage patients to ask questions about their medicines;
- **"Questions to Ask"** poster for the waiting room, exam rooms, or other consultation areas;
- **Assessment Pad** to allow providers to quickly assess patient barriers to medication adherence;
- **Medication List** to be filled in by a nurse, physician, or pharmacist to help patients understand their medication regimen; and
- **Provider Card** containing helpful hints and resources for providers to use when talking to patients about medication adherence.

The tools are available free of charge to New York City providers by calling 311. Those outside (and inside!) NYC can download these tools from: http://www.nyc.gov/heartworks.

2) **A two-part guide,** designed to help you put the MAP tools into practice:

- **Part One** of the guide contains medication adherence basics, instructions for using each tool, instructions for incorporating the tools in your office flow, and suggestions for introducing tools to your colleagues.
- **Part Two** provides a train-the-trainer curriculum that guides you in implementing MAP training sessions for your onsite colleagues.

3) **Two PowerPoint presentations** that can be used as stand-alone information pieces or as part of a MAP training at your site. PowerPoints may also be found at www.nyc.gov/heartworks.

In designing this guide, we have tried to be as sensitive as possible to the time constraints faced by providers. The MAP trainings conducted from 2007 to 2009 required participants to devote approximately eight hours over a five-week period to the program. We understand that you may not have this much time. Throughout Parts One and Two, there are tips on how to quickly implement the tools or conduct brief high-yield trainings.

MAP's Basis in Quality Improvement Principles

MAP's approach is evidence-based and grounded in clinical Quality Improvement (QI) principles. QI is a field that examines processes in order to improve them. QI uses an approach that prioritizes teamwork, systems and processes, patient focus, and measurement. (Institute of Medicine)

MAP incorporates principles of Dr. Ed Wagner's **Chronic Care Model (CCM)**, a fundamental QI model for health care delivery. The CCM, which relies upon a team approach for the provision of care, describes six elements of the health system that interact to produce improved outcomes for chronic disease patients: health care organization, decision support, delivery system design, clinical information systems, self-management support, and community resources and policies. MAP emphasizes a team approach to addressing medication adherence with patients and uses the CCM structure to guide practice-based interventions.

For more information about the CCM, please visit:
http://www.improvingchroniccare.org/index.php?p=The_Chronic_Care_Model&s=2

MAP's training structure is based on the **Model for Improvement**, a QI methodology developed by Associates in Process Improvement (API) and tested extensively by the Institute for Healthcare Improvement (IHI) and other QI organizations. The Model for Improvement relies on small cycles of testing ("Plan-Do-Study-Act" cycles) to guide practice changes in order to assess whether that change is an improvement over the status quo. In the model's application, we emphasize testing each new tool and method with a limited number of your colleagues or patients before implementing any of them practice-wide or at an institutional level.

For more information about the Model for Improvement, please visit:
http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove/

Consult **Appendix 4** of the manual for additional QI resources on the Internet.

PART ONE:
Medication Adherence 101

PART ONE

Section 1

Medication Adherence 101:
Understanding Barriers & Solutions

> **"Drugs don't work in patients who don't take them."** **(C. Everett Koop, MD)**

Medications to treat hypertension, high cholesterol, diabetes, and other chronic conditions work and are widely available. However, the broad benefits of these drugs are not being realized because a large proportion of patients are not taking these medicines the way they are prescribed.

According to the Health Resources and Services Administration, "only 50% of patients with chronic illnesses maintain 'good adherence' (taking >80% of medication doses) over time" (Cheever, 2005). For conditions that require multiple medications, such as diabetes, adherence is even lower. Although adherence has been found to be the most important modifiable factor that can affect treatment outcomes in patients with type 2 diabetes, providers struggle to improve adherence among their patients (Nathan et al, 2006).

In this section, we will present an introduction to medication adherence research and practice:

- Adherence research and the MAP approach
- Common barriers to medication adherence
- Solutions to improve medication adherence
- The patient perspective
- Health literacy

Adherence Research and the MAP Approach

The adherence literature base is large and growing as an increasing number of researchers address the issue and its complexities. The journal articles listed in the bibliography and Appendix 1 will enhance your understanding of adherence research and present the evidence supporting the MAP toolkit and training methods. Five key points from these articles, and their translation into action via the MAP approach, are presented below.

1. Adherence improves patient outcomes.

Better medication adherence has been associated with improved clinical outcomes, while poorer adherence has been shown to correlate with increased adverse events for patients with chronic conditions:

- Patients with good adherence to statins have a lower risk of myocardial infarction (Wei et al, 2002);
- Decreased adherence is associated with increased hospitalizations and mortality among patients who have suffered a heart attack (Ho et al, 2006);
- Nonadherence among cardiovascular patients is correlated with a two-fold increase in cardiovascular events (Gehi et al, 2007); and
- Medication adherence has been associated with lower A1c levels for patients with type 2 diabetes (Rhee et al, 2005).

Improving medication adherence is an essential pillar of effective chronic disease care.

2. Start early! Engage patients in conversations about medicine-taking as soon as they are diagnosed with a condition that requires long-term medicine.

The process of adopting new behaviors is long and challenging. Studies have emphasized the importance of initiating collaborative work with patients as soon as they are diagnosed:

- In a study of statin adherence, patients who were taking newly prescribed statins and assigned to a patient counseling and education program showed a higher average number of prescription fill days than the control group and were more likely to fill prescriptions during the study period (Casebeer et al, 2009); and
- Among patients with cardiovascular risk factors taking newly prescribed statins, a delay in filling the first statin prescription predicted future non-adherence (Yu et al, 2008).

If you help your patients understand why adherence is important and how they can collaboratively work with you to improve it, then management of their disease will be more successful.

3. Improving medication adherence is one of the more achievable aspects of a collaborative self-management goal.

- In veterans with type 2 diabetes, "levels of adherence were generally high for medication management, but much lower for other aspects of self-management such as diet and self-managing of blood glucose" (Vijan et al, 2005); and
- Adolescents with type 2 diabetes were more willing to take their medicine than to make lifestyle changes (Rothman et al, 2008).

4. Chronic disease care requires a team approach.

Discussing and assessing medication adherence should be a routine component of chronic disease care. However, a single provider cannot deliver all the information needed to help patients manage their chronic conditions in time-limited office visits (Ostbye et al, 2005):

- A study of physician-pharmacist team-based care found that patients who received collaborative care "achieved significantly better blood pressure control compared to usual care with no difference in quality of life or satisfaction"(Hunt, et al., 2008);
- The National Council on Patient Information and Education and the World Health Organization advocate for a multidisciplinary approach to medication-taking behavior. Nurses, pharmacists, medical assistants—everyone involved in caring for the patient—has a role to play in engaging patients in conversations about medicine-taking throughout the continuum of care (NCPIE, 2007; WHO, 2003); and
- In a study to identify predictors of high quality care, "team care was associated with quality of care for diabetes care, access to care, continuity of care, and overall satisfaction" (Campbell et al, 2001).

5. Nonadherence costs.

Nonadherence to medication regimens not only results in poor clinical outcomes, it can also contribute to the rising costs of health care. Additionally, many studies have shown that better adherence translates into reductions in health care costs.

- Globally, "poor adherence has been estimated to cost approximately $177 billion annually in total direct and indirect health care costs" (WHO, 2003);
- For diabetes and hypercholesterolemia, "a high level of medication adherence was associated with lower disease-related medical costs" (Sokol et al, 2005); and
- In a study of type 2 diabetes patients, "a higher adherence rate was associated with significantly lower diabetes-related and total health care costs in this population" (Shenolikar et al, 2006).

Common Barriers to Medication Adherence

Patients face a variety of barriers to medicine-taking, some of which are within their power to overcome and some of which may be structural, institutional, or otherwise beyond the individual's control (Osterberg et al, 2005; WHO, 2003).

A needs assessment was completed by all of the MAP participants. It assessed their perception of patient barriers to adherence as well as their own barriers to supporting patient adherence. The needs assessment identified a number of barriers, including lack of training, lack of time, and lack of resources to address adherence. They were discouraged by their inability to motivate patients to take their medicines. **Poor medication adherence is a source of frustration for both the patient and the health care professional.**

The barriers listed in the boxes below have also been cited numerous times throughout the adherence literature. **Boxes 1 and 2** detail barriers commonly identified by providers and pharmacists, respectively, when working with patients to increase medication adherence; **Box 3** lists common barriers experienced by patients; and **Boxes 4** and **5** list provider and pharmacist solutions.

Keep in mind that as the number of barriers for the patient **and** provider ***increases,*** patient adherence ***decreases*** (Osterberg et al., 2005).

Box 1: Provider Barriers

Lack of time: *"The 15 minutes I have does not allow enough time to talk to my patients."*

Lack of resources and training to provide effective adherence counseling: *"I'm afraid to ask–I don't want to open up Pandora's Box!"*

Lack of understanding: *"Why don't my patients just do what I tell them?"*

Lack of reimbursement: *"I don't get paid to tell them how to take their medications and therefore cannot afford to make time."*

Unaware how to simplify regimens: *"How can I simplify, especially when my prescribing options are limited?"*

Unaware of options for lower-cost medicines: *"I don't know what to tell patients if they don't have the money—I can't tell them to take half a pill."*

Box 2: Pharmacist Barriers

Difficulty communicating with the prescriber: *"It's hard to reach the prescribers to recommend changes in medication in a timely manner."*

Language barriers: *"As a small business owner, I cannot afford to staff my pharmacy with translators for all of the different languages my clients speak."*

Lack of time to remind patients to pick up medications: *"There are systems in place to flag patients who don't pick up, but not enough time to call them all."*

Box 3: Patient Barriers

Complexity: *"There are so many pills, I can't keep them straight!"*

High cost: *"I can't afford my medicine so I will only take half a pill today."*

Difficulty remembering schedules: *"I forget to take them."*

Lack of understanding: *"Why do I need them?"*

Not feeling sick: *"I feel fine. I don't need them."*

Side effects: *"The yellow pills make me feel sick and I heard the blue pills give you liver problems."*

Embarrassment/Stigma: *"I don't want my friends to know that I'm sick."*

Depression: *"I don't care…. What's the point?"*

Health literacy: *"I can't understand these instructions!"*

Belief systems: *"My sister took insulin, then had her leg amputated."*

The Patient Perspective

The barriers listed in **Boxes 1 & 2** may already be quite familiar to you. In your work with patients, you have probably experienced some, if not all, of these challenges. However, the patient barriers listed in **Box 3** may not be as obvious.

Imagine you have diabetes, hypertension, hypercholesterolemia, and depression. Below is a list of your medications:

Drug Name	Frequency of Dosage	Cost per Month*
Metformin	BID	$18.00
Rosigitazone	Once a day	$157.00
Cozaar	Once a day	$58.00
Hydrochlorothiazide	1x/day	$8.00
Simvastatin	Once a day	$107.00
Paroxetine	1x/day	$23.00
Lifescan glucose strips	BID	$60.00
Diabetic Lancets	BID	$9.45
	TOTAL	**$440.45**

* From www.CRbestbuydrugs.org & www.Costco.com

If you were faced with this medication list, what might your immediate reactions be?

- **Overwhelmed** by the number of drugs and the frequency of doses.
- **Confused** by the names and the different dosages.
- **Worried** about the cost of your medicine, and wondering how you will afford it.

Patients experience these same reactions. Often, these reactions are compounded by low health literacy.

Solutions to Improve Medication Adherence

The barriers listed in the previous section interact to create a frustrating cycle for both patients and providers. In the boxes below, however, evidence-based solutions are provided. **Do not skip this section!** These messages are taken from the NYC DOHMH *City Health Information* "Improving Medication Adherence" (Kansagra et al, 2009), and are the basis for the MAP tools (pages 13-19).

Box 4: Provider Solutions

"My medicine makes me feel sick": Lower the dose; suggest ways to manage or reduce side effects; emphasize the long-term benefits of taking medication for chronic conditions.

"I feel fine": Explain how the patient's disease affects the body. Use the teach-back method to ensure your patient understands what you are saying. The teach-back method entails asking your patient to explain back to you what you have just told them. For example, you may want to say to your patient, "Pretend I am your husband. Explain to me why you need to take this medicine."

"I forget": Instead of a 30-day prescription, write a 90-day prescription; suggest reminders such as a pill box or cell phone alarm; fill out a medication list with the patient; suggest that the patient pick a pharmacy that uses a refill reminder system.

"My medicine costs too much": Prescribe generics when possible and offer information about prescription assistance programs and less costly sources for their medications (see the MAP Pocket Guide tool).

"It's too complicated": Consider switching to once-a-day or combination therapy; determine if any medications can be safely discontinued; use the Medication List tool to reconcile changes.

Box 5: Pharmacist Solutions

"I forget": Use pharmacy dispensing systems to alert you to patients who missed refills. You can also use color-coded stickers on bottles to identify patients who are late picking up refills and talk to them about why it is important to pick up their prescriptions on time.

"It's too complicated": Synchronize refill timings so that patients can pick up all their medications at the same time, and suggest that patients use one pharmacy for all of their medications. Finally, recommend simplified regimens to the patient's doctor.

"My medicine makes me feel sick": Communicate with patients' health care providers directly.

Health Literacy

Research indicates that low health literacy is associated with poor health outcomes in every disease category. **Health literacy** is defined by the US Dept. of Health and Human Services in *Healthy People 2010* as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (HHS, 2000).

For many patients, even highly educated ones, health literacy is a major obstacle to improving adherence. For less-educated patients, basic literacy issues compound the difficulties of understanding the language of health care. For non-English speaking patients, the problem is further exacerbated.

Below is a Web address to a 23-minute video produced by the American Medical Association Foundation that provides an excellent introduction to health literacy issues:

http://www.ama-assn.org/ama/pub/category/8035.html

When you visit this page, follow the instructions to view the 2007 Health Literacy Program Video: **"Health literacy and patient safety: Help patients understand"**

After you view the "Health Literacy" segment, **consider the following questions and jot down your answers in the space provided.** You should refer back to these impressions as you begin working with the MAP tools.

1. **Did any of the patient stories surprise you?**

2. **Do you assess patients' *literacy* and/or patients' *health literacy*? If so, how?**

3. **Identify aspects of your health center that may be challenging for people with low literacy or low health literacy skills. How can you make the situation better for patients?**

   For instance, review the signs in your center and identify any confusing language. Can you simplify or clarify the language used or replace words with images?

Health Literacy Summary Points

- **Literacy** and **health literacy** are two different issues. Both must be assessed before you can address the challenges they present to patients.
- Providers may feel uncomfortable addressing the issue of literacy because they do not want to offend their patients. Most patients, however, are relieved when their providers bring up the topic. Approach the topic by normalizing the difficulties that patients may face. You may want to say to your patient, *"Many of my patients have a hard time reading the materials that I give them. How comfortable are you reading this material?"*
- To ensure that patients understand you, use the teach-back method that is modeled in the video. Another way of assessing comprehension is the **"ask-tell-ask"** method:

- Ask the patient: "Pretend I am a member of your family and you are telling me how to take this medicine. What would you say?"
- Allow the patient to respond, and correct any information that he or she may have misunderstood; and
- Ensure the patient verbalizes the correct instructions before you move on.

- Once you assess literacy and health literacy, address the challenges. The MAP tools will help you. Other ways of addressing challenges include:
  - If patient is taking a medicine more than once a day, use color-coded stickers to indicate dosing;
  - Take advantage of language services/interpreters if they are available in your health center. Be sure that interpreters assess and address health literacy in patients' native languages;
  - Use visual aids whenever possible during the patient encounter;
  - Posters and signage should be in the language(s) of your patients;
  - Use plain language; and
  - Increase staff awareness of patient literacy issues. Make assessing and addressing literacy/health literacy issues a standard part of every patient visit.

Supplemental Materials

We also encourage you to watch three short videos available through the Fund for Public Health in New York; links are listed in Appendix 7:

- A "Patient Perspective" video with a real patient who describes the difficulties she faces in managing multiple chronic diseases;
- A "Barriers to Adherence" video features a physician who is a MAP graduate and health literacy expert speaking about the importance of addressing adherence with patients; and
- A role play between a provider and patient, modeling a brief, effective conversation about medication adherence.

For those who may want to present the evidence base for the tools, please feel free to use and/or adapt the MAP PowerPoint presentations, "Medication Adherence Presentation" and "MAP Tools Presentation." The presentations are located on the CD component of this guide.

Finally, for those who may not have time to read all of the articles included in the *Additional Bibliography* located at the end of the guide, the following is a short recommended reading list:

Cooper, LA. A 41-year-old African American man with poorly controlled hypertension: review of patient and physician factors related to hypertension treatment adherence. *JAMA.* 2009;301(12):1260-1272.

Kansagra, SM, Angell SY, Starr B, Silver, LD. Improving medication adherence. *City Health Information.* 2009;28(suppl 4):1-8.

Piette, JD, Heisler, M, & Wagner, TH. Cost-Related Medication Underuse: Do Patients With Chronic Illnesses Tell Their Doctors? *JAMA.* 2004;164:1747-1755.

Section 2

Medication Adherence 101:
An Introduction to the MAP Tools

The MAP tools support providers seeking to motivate their patients to better self-manage their chronic condition(s). In this section, we present the five tools and introduce you to techniques that will help you assess and address patient barriers to medication adherence.

The tools are designed to help you to conduct productive, effective conversations with patients about medicine-taking at the point of care. They will also facilitate follow-up with patients to ensure that patients improve their long-term adherence to medications.

All tools are based on successful strategies and interventions reported in the published literature pertaining to medication adherence, self-management, and health literacy. The tools presented here are final versions of tools that were tested and evaluated by more than 100 health care providers working in busy, ambulatory care settings in NYC and were refined by the NYC DOHMH Public Health Detailing and Cardiovascular Disease Prevention and Control Programs.

Printable PDFs of the tools in English and Spanish are also available at http://www.nyc.gov/html/doh/html/csi/csi-detailing.shtml

Getting Started

Directions for using each tool are below. We include a helpful hints section, as well as **"Comments from the Field,"** real feedback from providers who have used them in practice. We encourage you to use the **Homework Guide** (Appendix 2) as you use the tools.

While testing the tools, you may develop new ideas about how to use them. Share your ideas with your team members.

TOOLS #1 & #2:
"Questions to Ask" Pad & Poster

Purpose:

To encourage patients to ask their health care provider or pharmacist questions about their medicine(s).

Where:

The pad should be placed prominently at the front desk where every patient will see it when they check in.

The poster also should be placed prominently in the waiting room, exam room, pharmacy, or any other place where patients will see it, such as the elevator or bathroom.

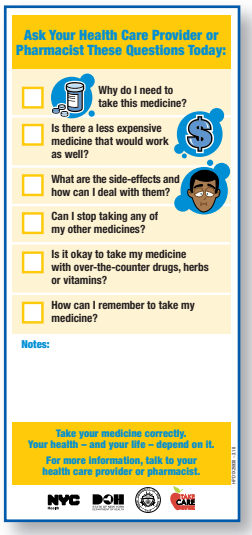
When:

Patients should see the poster and/or pad ***before*** they are seen by the doctor or pharmacist.

How:

The front office staff refers patients to the pad when they check in. Staff encourages patients to take copies with them into the exam room or consultation area and voice their questions.

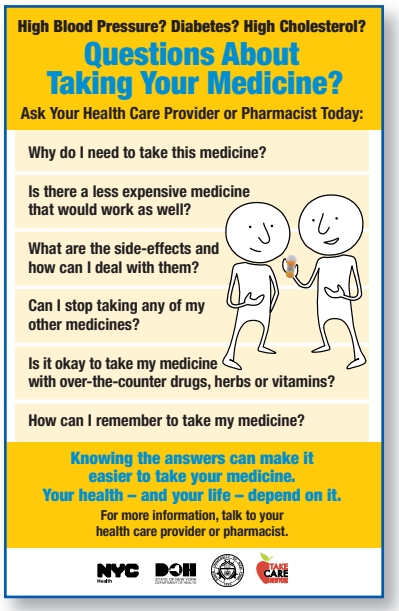
Questions to Ask Pad



Ideally, the support staff reads the questions to patients and asks patients to jot down any other questions they have.

The pad and poster also prompt providers and pharmacists to encourage patients to ask about their medicines–or about other aspects of their health care.

Questions to Ask Poster



Helpful Hints:

Providers may be hesitant to ask front desk staff or other nonclinical staff to assist in the implementation of this tool so as not to overburden them. However, in almost every MAP training session, participants reported being pleasantly surprised that administrative staff was eager to help. Moreover, in busy community health centers and other outpatient care settings, administrative staff members often share the same cultural background, reside in the same neighborhoods, and speak the same languages as their patients. Patients often feel comfortable speaking openly with the administrative staff and may be more likely to raise their concerns to these staff members than to their health care providers.

Be inclusive! Involve front desk staff.

Comments from the Field:

Several physicians reported back a remarkable response by patients: **"I never knew I could ask you questions."** Providers found this response surprising and enlightening, and it encouraged them to work harder to incorporate the tool into each patient visit.

MAP participants also noted that this tool made patients feel more at ease and confident to ask questions. Many said the tool supports patient self-efficacy and helps patients be more proactive in their disease management and overall health care.

Additional comments from MAP participants include:

- "[It is] empowering to patients to feel they can/should be asking questions."
- "Patients said they would not have thought of asking questions if they did not see the poster."
- "The pad gave the patient ideas on how to ask and what kind of questions to ask."
- "One patient felt relieved because she was embarrassed to ask questions."

TOOL #3:
Adherence Assessment Pad

Purpose:

In order to address barriers to adherence, we must first assess these barriers. The Assessment Pad is designed to help providers assess barriers to medication adherence quickly and systematically.

Where:

Pads should be easily accessible in all of the exam rooms, the nurses' station(s), and the pharmacy. They can also be carried in coat pockets.

When:

Use the pad to assess adherence at *every* visit, for example when you take a patient's blood pressure and other vitals. If you are using the pad in a pharmacy, use the pad with patients when patients pick up their medicine(s).

Adherence Assessment Pad

How:

Assume that patients are not taking their medicines correctly.

1. The care team member who takes the vital signs should ask patients about adherence using the pad. If you are using the pad in a pharmacy, front staff (technician or clerk) can do the assessment, and the pharmacist should follow up with the counseling.
2. Ask the patient, "A lot of people have trouble taking medicine the way their doctors ask them to. What gets in the way of taking your medicine?" Or, "What concerns you the most about your medicine?"
   - Avoid closed-ended (yes or no) questions, such as "Are you taking your medicine?" or "Do you have any problems taking your medicines?" Closed-ended questions inhibit a patient from describing his or her honest experience. Patients will try to avoid "disappointing" the health care provider.
3. If the patient does not volunteer an answer, offer the suggestions listed on the pad.
4. The completed form should then be transferred to the physician, pharmacist, or other care provider to discuss identified barriers with the patient during the exam. Speak with the care team about the most efficient way to facilitate the transfer of information: if your office is using paper charts, place the assessment sheet in the chart where the doctor can't miss it. If your practice uses an electronic health record (EHR), document the barrier and the follow-up counseling in a designated place in the electronic record.
5. Discuss the use of this tool with providers at your site and emphasize their role in making this tool worthwhile.
6. Alternatively, if you are certain that your patient is able to read and understand the content, assign front desk staff to give it to the patient for him/her to fill it out independently.
   - If patients are holding blank sheets when they come into the exam room, then something went wrong. Patients may not have understood how to use the pad or may not understand the language on the pad.
   - Review the health literacy section for additional guidance.

Helpful Hints:

Some patients may identify more than one barrier.

- Ask the patient, “Which of the barriers that you identified concerns you most?”
- If you have limited time, respond to the patient’s concerns about that issue only and tell the patient that you can address other concerns during the next visit.
- If your site has an EHR you may be able to use a text field dedicated to goal-setting or other area for notes. For example: *“Spoke to patient about barriers to medicine-taking. Discussed difficulty with remembering to take medication. Patient will set alarm as a reminder.”*

Comments from the Field:

The Assessment Pad is ideal for those with limited time to conduct extensive counseling with patients. Physicians and pharmacists report that the Assessment Pad provided a quick and easy way to initiate the conversation and focus on specific adherence barriers.

One physician who tried the Assessment Pad himself before giving it to his staff found that asking the question, *“What gets in the way of taking your medicine?”* elicited more truthful responses from patients and allowed him to effectively hone in on specific barriers. As a result, he made asking about adherence a routine part of his practice.

Additional observations about the Assessment Pad included:

- “The tool helps to provide information by the patient that often does not get [addressed] during the office visit.”
- “The question encourages truthful disclosure, validates a positive response.”
- “[Provides a] ‘reminder to self’ to ask about adherence routinely.”
- “This tool has allowed me to detect even more barriers [to adherence] that are not always apparent.”

Tool #4:
My Medication List

Purpose:

To provide easy-to-understand instructions for patients about their medication regimen.

The Medication List is a chart with spaces for you to list all medicines and over-the-counter pills that patients are taking, provide an explanation for why each was prescribed, and directions for when to take each medication.

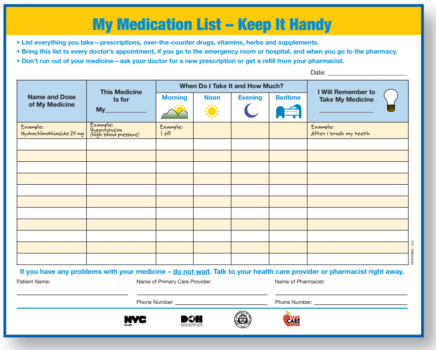
Where:

Copies of the list should be easily accessible in all exam rooms and in the pharmacy. Ideally, the list should also be saved onto your computer desktop (available on the CD included with this manual and online at http://www.nyc.gov/html/doh/html/csi/csi-detailing.shtml) or incorporated into the EHR.

When:

Use the list at the end of the visit, after all medicines have been discussed or when you reconcile medicines with your patient.

My Medication List



My Medication List – Keep It Handy

- List everything you take—prescriptions, over-the-counter drugs, vitamins, herbs and supplements.
- Bring this list to every doctor’s appointment, if you go to the emergency room or hospital, and when you go to the pharmacy.
- Don’t run out of your medicine—ask your doctor for a new prescription or get a refill from your pharmacist.

Date: ______________

Name and Dose of My Medicine	This Medicine Is for My______	When Do I Take It and How Much?				I Will Remember to Take My Medicine ______
		Morning	Noon	Evening	Bedtime	
Example: Hydrochlorothiazide 25 mg	Example: Hypertension (high blood pressure)	Example: 1 pill				Example: After I brush my teeth

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If you have any problems with your medicine – do not wait. Talk to your health care provider or pharmacist right away.

Patient Name: ______________

Name of Primary Care Provider: ______________ Phone Number: ______________

Name of Pharmacist: ______________ Phone Number: ______________

How:

1. A physician, nurse, or pharmacist should complete the list ***with*** patients during the office visit or in a pharmacy after medication refill.
   - Avoid giving it to the patients to fill out themselves, as they may enter information incorrectly without guidance.
   - Use the **'brown bag method'**: Ask patients to bring in a bag containing all of their medicines. Review the contents with the patient as you fill out the list. If any medications in the bag have been discontinued, dispose of them immediately. This will help with medication reconciliation, assuring that patients have only currently prescribed medications.
2. Instruct patients to put the list where they will see it every day.
3. Ask patients to bring the list back at the next visit.
4. Review the list with patients at every visit.

Helpful Hints:

Filling out the Medication List may seem time consuming. However, your initial investment will pay off, as patients better understand their regimens and adherence increases. Furthermore, relationships with your patients will improve based on the time you commit to this conversation. The version included on this CD is a "writable" version so that you may be able to save each patient's list onto your computer. If possible, link the Medication List to your EHR.

The Medication List differs from "medication lists" commonly available for printing from EHRs because it uses pictorial representations of when patients should take medicines and prompts clinicians to explain the purpose of each medication. The list is especially useful for patients with limited literacy and/or health literacy issues.

Comments from the Field:

This tool was the uncontested favorite among MAP participants. There was initial resistance to the tool due to the time necessary to fill it out. However, this resistance vanished as providers saw the benefits.

Some MAP participants taped pills to the Medication List to clarify which pills were indicated by which name. This method proved troublesome, however, because brand-name and generic medicines often change color and shape. If you tape pills to the sheet, make sure to review the pills regularly to ensure that they have not changed.

Specific comments from MAP participants included:

- "This is an excellent tool, worth spending the time…advised my patients to bring [the lists] to every visit, so I can make changes if needed."
- "Patient thought this was great. Patient is on 15 medications and is now able to carry this list with her to other appointments."
- "It is a good [starting point] for chronic disease patients; it is helpful from the beginning when patient is newly diagnosed."
- "[My patient told me], 'the log helps me to remember what each pill is for.' "
- "[My patient told me], 'I like the list better than pill-boxes because it reminds me when to take my medicine.' "

Tool #5:
Pocket Guide

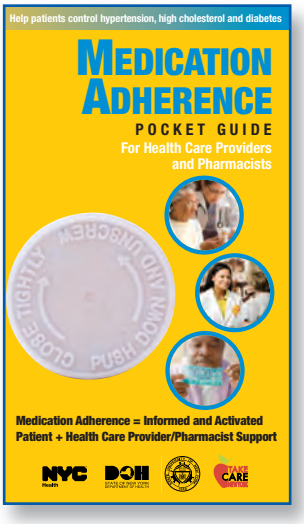
Purpose:

To guide providers and pharmacists addressing common barriers during the patient visit.

Where:

The Pocket Guide can be stored in a coat or uniform pocket. It should also be available in every exam room, nurses' station(s), and the front counter of the pharmacy.

Pocket Guide



When:

Use when counseling patients about medications.

How:

1. Use the Pocket Guide for tips on how to address the most common barriers to adherence. The guide includes standard effective conversation-starters and responses to patient-identified challenges.
2. The ***Resources*** section provides organizations' Web sites and phone numbers for more information about medication adherence training and tools, and for patients who need access to low-cost medicines and would like to educate themselves further about the medications they are taking.

Helpful Hints:

When using the Pocket Guide:

- **Listen to the patient.** Before you attempt to provide advice, make sure you have fully heard the patient's concerns. Respond to the patient using reflective listening techniques and other methods described in Section 3. Demonstrating that you have heard your patients' concerns will increase the likelihood that they will be receptive to your advice.
- It is not essential for you to memorize all of the tips on this card. **Feel comfortable reviewing the card with patients.** It may help them to realize they are not alone in the challenges they face.

Comments from the Field:

Most MAP participants tried storing this tool in a few different places before they found one that worked for them. Many clinicians preferred the coat pocket.

Participants appreciated that the Pocket Guide gave specific language to respond to patients' concerns. Physicians noted that this information was never taught to them in medical school. In fact, the Pocket Guide is now used as a teaching tool in a family medicine residency program.

Several participants noted that they were uncomfortable using the card at first while speaking to patients because they were worried that their answers could appear insincere. However they found that patients responded positively when they saw them refer to the Pocket Guide. One physician uses it like "any other clinical tool," and refers to it freely–a technique that works well for her.

Additional feedback from MAP participants included:

- "I like it; it reminds me how to talk to patients."
- "After I [started using] this tool, some patients reported that they felt like I tailored their medication regimen especially to their needs."
- "Helps you to think about how to initiate the conversation about medication adherence."
- "The Pocket Guide gears the conversation towards eliciting feedback from the patient–therefore, you are able to help problem-solve the patient's concerns."
- "It helps me to engage patients in discussing issues with taking medication."

Testing the Tools in Practice

Now that you have *read* about how to use the tools, it's time to *use* them. To get the most out of the toolkit, try using them all at least a few times before deciding which are best-suited to your practice and which may need to be adapted and/or used in different ways than suggested.

The **Homework Guide** will help structure how you use the tools. The assignments direct participants to use each tool with at least one patient every day for the first week, with two patients every day during the second week, and so on. Staff members are directed to record their experiences and share them with colleagues regularly. In our experience, assigning homework resulted in greater participation.

Now STOP and review the *Homework Guide* located in Appendix 2.

Section 3

Medication Adherence 101:
Engaging and Informing Patients

At this point, you have learned the basics of medication adherence, and you have gained a better understanding of the barriers that patients face taking their medicines. You have also learned about the barriers the care team confronts in providing adherence counseling. Finally, you have been introduced to the MAP tools, which are designed to help you engage patients in conversations about medicine-taking.

In this section, we provide a framework for you to use when speaking with patients about medication adherence. Based on communications theory, it is called **"Engaging and Informing the Patient"** (National Cancer Institute, 1995).

Engaging the Patient

How can you best engage the patient in a productive conversation? Tips offered below assist you to establish a positive, supportive environment for the interaction.

- **Begin with the Patient's Concerns.**
  As a provider, you must address clinical issues that you view as critical to the patient's health and well-being. However, patients have their own concerns, and those concerns are at the top of their list. Address your patients' concerns first. A good question to ask your patient is, *"What concerns you most about your health right now?"* Listening and responding to their questions will build patient trust, which has been shown to lead to better adherence (Schneider et al, 2004).

  Additionally, listening to a patient's concerns for just one minute can be enough for a patient to express critical information. This information ultimately helps to focus the visit toward productive outcomes–in effect, saving you precious time and energy!

- **Use Active Listening Techniques** (Bodenheimer et al, 2005).
  Active listening shows your patients that you are interested in their issues. Here are some active listening techniques:

  - **Restate Facts:** "So, you're saying that you stopped taking your medicine because the morning dose made you feel ill."
  - **Reflect Feelings:** "I understand how frustrating that must have been for you."
  - **Use Supportive Statements:** "You did the right thing by telling me about this problem. Now we can work together to find a solution."
  - **Clarify Facts:** "Did you say that you had trouble with the morning dose, but that the evening dose was OK for you?"
  - **Validate the Patient's Experience:** "Many of my patients also encounter side effects. Maybe some of the solutions that have worked for them will work for you."

- **Ask Open-ended Questions** (Seghal, 2007).
  Closed-ended (yes/no) questions make it easy for patients to keep quiet about their problems. Open-ended questions invite them to verbalize their issues. Asking patients *"What gets in the way of taking your medicines?"* normalizes the barriers that patients face, and encourages a positive, specific response. By contrast, the questions *"Do you have any problems with your medicines?"* or *"Is everything okay with your medicines?"* allows patients to simply nod or shake their heads.

- **Identify the Patient's Strengths and Successes.**
  Acknowledge patients' successes even though it's sometimes easier to focus on patients' limitations.
  - A patient who successfully stopped smoking may be having trouble remembering to take statins. Acknowledge that smoking cessation is incredibly difficult, congratulate the achievement, and consider how to encourage her to use her willpower to improve adherence.
- **Be Aware of the Nonverbal Signals** (Beck et al, 2002).
  You may say the right words, but if your facial expression is disapproving, you may sabotage your efforts at supportive counseling. Remain conscious of your nonverbal communication. Keep your arms loose in your lap–not tight across your chest–and maintain eye contact to show that you are interested. Smile and nod. These small signs encourage the patient to talk openly. And make sure to notice your patient's nonverbal signals as well.

Informing the Patient

Providers are trained to deliver health information to patients. Below are a few tips for effective patient education.

- **Review medications with patients.**
  Inform them of side effects, directions for proper use, and cost-saving strategies. Assess health literacy and comprehension level with all patients (Tarn et al, 2006).
- **Teach strategies for remembering to take medicines.**
  Show patients how to use a pill box or how to set a cell phone reminder, for example (Osterberg & Blaschke, 2005; Glasgow et al, 2003) The MAP tools will help you.
- **Explain in plain language:**
  - How each medicine works in the body to address disease.
  - The **consequences** of not taking medicines.
  - How to manage side effects.

  Patients are more likely to adhere if they understand how medicines work, why they need them, and what the long-term benefits or the negative consequences are if they don't take them. Avoid jargon, and speak slowly and clearly (Heisler et al, 2002; Osterberg & Blaschke, 2005).
- **Offer resources to patients.**
  Direct them to low-cost options for medicines and sources of support for adherence.

Partnership with Patients

Patients who view themselves as partners in their health care decision-making and are actively engaged in their own care have better adherence and better clinical outcomes. In addition, those who are satisfied with their provider relationship are more likely to heed providers' advice and return for follow-up visits (DiMatteo et al, 1993; Bodenheimer et al, 2002; Wroth & Pathman, 2006).

Not all patients will be ready to collaborate, and MAP tools will not work with every patient. However, there are steps you can take to help unwilling patients begin to think about a collaborative relationship. For example, if patients do not want to make a plan with you to remind them about refills, you can still encourage them by saying, "Perhaps before you come in for the next visit you can think about ways to help make taking your medicine easier." Don't forget to ask at the next visit if they have thought of any ways to improve their adherence.

Section 4

Medication Adherence 101:
Integrating MAP Tools Into Practice

Once you begin using MAP tools with patients, you will notice that some changes need to be made in your office flow to support the integration of the tools into practice. Barriers may rise. Examples of some common scenarios include the following:

- You want to post the **Questions to Ask** poster on the wall of the health center's waiting room or on a wall of the pharmacy, but it must first be approved by the clinic's senior administrator or pharmacy owner.
- You want to use the **Medication List**, but find it difficult to implement in paper form, and want to integrate it into the EHR.
- You used the **Assessment Pad** to identify medication-adherence barriers while taking a patient's vital signs, but the doctor neglected to follow up with the patient in the exam room.

In this section, we will introduce you to three core strategies to address barriers to using the MAP tools and to integrate them successfully into your practice:

- **Anticipate obstacles**
- **Redesign workflows**
- **Engage your colleagues**

1. Anticipate Obstacles

Before you begin to integrate the tools into your practice, consider the obstacles that might prevent you from achieving your goals.

- **Seek approval for the tools.** Many health centers and pharmacies require prior approval for new forms that are used during the patient encounter. In some organizations, forms may be approved via an informal consultation; in other health centers, forms must go through a lengthy committee process. Identify the necessary steps and plan accordingly.
- **Store tools where you can easily see and use them.** Are your patient encounters confined to a single room, desk, or station? Probably not. Most providers and pharmacists are constantly moving from place to place, with no single station that they call their own. Keep copies of the tools in all of your exam rooms. Put a poster on the wall; keep an Assessment Pad on the desk; and make sure you have multiple Medication Lists printed and ready for use. Store tools in places that are visible and accessible.
- **Notify your colleagues that you will be trying out new tools.** Even if you are not ready to introduce the tools to your colleagues and staff, this notification will minimize surprises.

2. Engage Your Colleagues

Each staff member has a role in making sure that patients understand the importance of taking their medicines. Consistent messaging about the importance of adherence from *each* member of the health care team helps communicate to patients that improving adherence is a priority. If you are not in a position to conduct a formal, or site-wide, training (see Part Two of this manual), you can still introduce the MAP tools to your colleagues on a smaller scale:

- **Communicate with your senior leadership about MAP.** Senior leadership buy-in is one of the best ways of putting MAP on the radar of your entire practice.

- **Introduce MAP at a staff meeting.** Give a brief presentation in which you describe the evidence for MAP and introduce the MAP tools.

  Step 1: Describe the role that each staff member can play in implementing the tools. Be sure to include all staff titles in your description and stress the importance of a team approach.

  Step 2: Encourage staff to try one tool with one patient every day during the coming week. Once colleagues are comfortable using the first tool, ask them to try another one.

  Step 3: Schedule time for follow-up during the next staff meeting to discuss how things are going and help colleagues troubleshoot.

- **Conduct informal one-on-one trainings.** Train members of your care team with whom you work the closest. Find 10 minutes for a brief training. If your practice uses "huddles" or other Quality Improvement techniques, use those opportunities to discuss the tools. If no such mechanisms exist, take advantage of extra time (if possible) when patients miss appointments.

- **Conduct formal trainings.** If you have the opportunity to formally train your colleagues, Part Two of this manual provides you with the guidance you need to implement your own MAP Training onsite–whether you have four hours, 90 minutes, or 30 minutes.

* Hints to Enhance Your Success *

- **Make sure you are comfortable using the tools yourself before introducing them to colleagues.**

- **Look for champions.** Start with the members of your staff who are willing to try new ways to improve patient care.

- **Offer evidence for the clinical importance of adherence on outcomes. For example:**

  Effect of Adherence on Outcomes

  - Patients who stopped taking all of their cardiovascular medication one month after a heart attack were three to five times more likely to die compared with those who continued at least one of their medications (Ho et al, 2006).
  - Patients with heart disease who reported taking their medications less than half the time had almost double the risk of cardiovascular events (Gehi et al, 2007).
  - Patients with diabetes and good medication adherence had 2.2% lower A1c level compared to patients with poor adherence (Rhee et al, 2005).

  Effect of Adherence on Costs

  - Although good adherence can lead to slightly higher medication costs in patients with diabetes, high cholesterol or hypertension, total medical costs are about $1000 to $8,000 less due to avoided hospitalizations (Sokol et al, 2005).
  - For patients with diabetes, every 10% increase in adherence is linked with a 4% decrease in total medical costs (Shenolikar et al, 2006).

- **There are always some slow adopters of new methods.** Adapting to new technology, to revised clinical guidelines, and to other enhancements does not happen overnight. Health centers may fear that change will negatively impact patient care in the short term, even if the new methods might improve care in the long run.

3. Redesign Workflows or Office Systems

Integrating MAP tools into your health center's flow will require changes in office procedures. Always try out small changes before trying to implement site-wide modifications. This way, minimal disruptions to patient care processes will be encountered, and you will find it easier to attract staff buy-in to MAP and to other changes you want to make. Here are some tips to guide you:

a. Consider changes at the point of care. Think about your interactions with patients and consider how you can make small changes to support the use of MAP tools during the patient encounter.

- **When and Where?** Consider the environment in which will you initiate a conversation about medicine-taking with your patients. How will you create an opportunity to assess and address patient concerns about medicine? Suggestions for a location to initiate a conversation on adherence include:
  - At the front desk, when the patient signs in;
  - In a semiprivate area, while taking the patient's vitals; or
  - In an exam room, during the clinical portion of the patient encounter.
- **Select your key tools.** Once you have practiced using the tools, you will learn which tools are best suited to your role (as a nurse, pharmacist, physician, etc.) and which ones may be more appropriately used by other members of your care team.
- **Make the tools easily accessible during the encounter.** Store the MAP materials so that they are available when and where you need them.

b. Build on your small successes to make practice-wide changes.

- **Work with senior leadership to set priorities.** Lobby administrators to identify medication adherence assessment and counseling as a priority for the entire practice.
- **Provide training.** Providers will require training to help them use the new Electronic Health Record (EHR) features. Budget sufficient time and resources for training.
- **Incorporate MAP tools and/or communication techniques into the EHR.** Many MAP graduates identified the incorporation of MAP tools in the EHR as a key next step in their work. This step typically involves various departments. Depending upon the size of your health center (or care network), the priorities of your senior leadership, and the ease with which your EHR can be modified, integration of the tools within the EHR may take a few different forms. Here are a few examples:

Example 1: Integrate the Medication List Within the EHR

Step 1: Integrate a writable/printable PDF format of the Medication List (included on the CD component of the guide) into the patient record. Prescribers can fill out the form during the patient encounter, store a copy for the patient record, and print a copy for the patient to take home.

Step 2: Work with Health Information Technology (HIT) staff to synchronize the Medication List with existing medication lists or other related EHR functionalities.

Example 2: Make Assessing Medication Adherence Simple at Every Visit

Step 1: Modify the EHR to include a point-of-care clinical reminder to assess medication adherence. If your EHR can link to pharmacy data, develop a special alert for patients who have missed refills.

Step 2: Include a designated text field for comments about patients' challenges related to medication adherence. You can also use this space to record specific strategies that they negotiate with patients to increase adherence.

Example 3: Provide Links to Patient Education Materials Within the Record

Make MAP patient education materials available through a simple link, so that providers and staff are able to print and distribute the materials easily.

Example 4: Establish a Patient Portal in Your EHR

Allowing your patients access to their own records and communicate with you or your staff may allow them to better self-manage their health.

Medication Adherence 101

PART TWO:
Training Your Team

PART TWO

Section 1

Training Your Team:
Training a MAP Team

MAP's approach encourages you to focus on building a care team at your site. Defining each staff member's role in patient care processes and helping your colleagues identify ways in which they can work with patients to improve medication adherence are essential to integrating MAP tools into your practice.

In Part One of this manual you went through the MAP training course. You practiced the tools and introduced them to your colleagues. How did it go? Did you encounter resistance from colleagues? Did you find an unlikely champion?

You may have been able to persuade a colleague to start using the Assessment Pad, but it's unlikely you had time to provide the evidence base for *why* he or she should use the Assessment Pad. In Part Two you will learn how to conduct a more formal training based on what you learned in Part One. After reading Part Two, you will be better-equipped to provide the necessary evidence base to your colleagues to ensure that the use of the Assessment Pad is sustained. Part Two is also for providers who would like to disseminate MAP to a larger audience. It is a step-by-step guide on how give a MAP training that include sample agendas, talking points, and PowerPoint Presentations.

Part Two is written for those with or without previous experience in training or in planning curricula. The only prerequisites for Part Two are an understanding of Part One, readiness to implement a formal training session at your site, and a commitment to following up that session with ongoing check-ins and improvement work with the participants.

Note:

If you are a health education or training specialist, you may already be familiar with some of the content we present related to planning a training session. Still, we encourage you to read through the entire section as a refresher. Part Two of the manual–like Part One–is based on our experience in implementing MAP train-the-trainer courses. We have condensed a large volume of information and recommendations to present the most essential pieces.

Section 2

Training Your Team:
Getting Started

What do you want to accomplish when conducting a training for your colleagues?

Below are some things to think about as you envision the structure of your training course.

- **Define your plans.** The long-term goal of training your colleagues is to help them work most effectively with patients to improve medication adherence. Initially, however, as you plan a training session for your colleagues, narrow your focus to the immediate tasks at hand. Your objectives should be short-term, achievable outcomes. Some sample training objectives follow:
  - **For a Nurse Educator in a community health center:**
    Train all nursing staff members (LPN/RN/NP) to use the MAP tools with with patients with hypertension by the end of this month; follow up the training with a short refresher course each month for the next three months.
  - **For a Clinical Administrator in a large ambulatory care practice:**
    Train groups of physicians, nurses, medical assistants, and administrative staff to use the MAP tools. Train groups of six to eight people and conduct one training, with follow-up, each month until the entire staff is trained.
  - **For a Pharmacist or Physician in a small practice:**
    Train all staff to use the MAP tools over the next eight weeks. Over the next three months, conduct weekly check-ins during your staff meetings to ensure staff members are implementing the tools correctly.
- **Be realistic.** Even if your goal is to train everyone in the practice, you may not be able to do so all at once. Develop a plan to train people incrementally, beginning with the staff members who are most likely to respond positively to the training and tools.
- **Think about follow-up.** In Part One, we emphasized the importance of following up with patients to support their efforts to self-manage medicine-taking at home. Similarly, when you train staff, following up with individual staff members will be critical to reinforcing what they learned in the training session and making sure they take action.
- **Make sure you have senior leadership buy-in.** If you need permission to reserve protected time with staff to conduct the training, request the time from senior leadership. Present them with a proposed training schedule that includes information such as the names of staff to be trained, the dates of trainings, and the length of each training session and your follow-up plan after the training is over.
- **Make sure you feel comfortable with the literature.** In the references section, you'll find that we've indicated key reading material for trainers with an asterix (*). Further, please see Appendix 1, for key high-yield publications to assist you to quickly become familiar with the literature.

On the following pages, you will find two worksheets that will assist you through the course planning process.

- A one-page exercise that will help you envision the course from beginning to end, and
- A two-page guide to the logistics of planning and implementing your training session.

Write your answers directly on the worksheets, so that you have a record of your planning process.

Worksheet 1:
Planning the MAP Training Course

1. **Whom do you want to train?**
   - Doctors, Nurses, Patient Care Assistants, Pharmacists, Health Educators, Front Desk staff
   - Do you want to train them all or train only one staff title that you think will realistically be able to follow up with patients?

2. **How much time will you need – or be able to secure – to conduct a formal training?**
   - Is it possible to schedule a special half-day?
   - Do you need to limit the course to 90 minutes or 30 minutes?
   - Do you need to train in small groups? If so, will this require multiple sessions?

3. **What are some of the barriers to training staff (e.g., no time, no room, no senior leadership buy-in)? How will you overcome them?**

4. **How will you follow up after the training? (One-shot trainings do not work!)**
   - Conduct a follow-up session.
   - Ask participants to complete a follow-up survey/evaluation.
   - Designate a team leader(s) to follow up with their group.

5. **Do you plan to apply for continuing education credits for the participants (e.g., CME, CEU, CNE)? If so, how long do you need to plan in advance and submit your application?**

Worksheet 2:
Logistical Considerations for your Training Session

1. Facilitation Considerations

Will you facilitate the workshop alone or with other trainers? If you will have a co-facilitator, which parts of the training will you each be responsible for?

Note: You may find it helpful to attach an annotated outline of the session to this worksheet where you clearly indicate which trainer will lead which section.

_____

_____

_____

_____

2. Equipment/Materials Considerations

What materials and equipment will you need?*

Consider the following checklist:

☐ PowerPoint Presentations on Medication Adherence
☐ Engaging the Patient-Informing the Patient Handouts
☐ Case Study for Role-Play Exercise
☐ Training Goal and Objectives
☐ End-of-Training Evaluations
☐ A Flipchart with Easel Pad; Markers; Masking Tape; Name Tags
☐ Laptop and Projector for PowerPoint
☐ Order/print copies of tools
☐ Other Materials or Equipment? (sign-in sheets, etc.)

_____

* On the CD included in this toolkit you will find PDF files of all necessary handouts and PowerPoint Slides needed to conduct the session. You will need to print out and/or photocopy handouts for each participant.

3. Environmental Considerations

Which room/venue have you selected for your training?

_____

When will you set up the room for the training? Have you secured permission to set up your room in advance?

_____

Is the space conducive to interactive training? Is there enough space to hang up visuals and/or move around?

_____

If you plan to offer food and/or beverages to participants, which vendor will supply them? How many days in advance must your order be placed?

_____

_____

4. Audience Considerations

How will you recruit participants? (e.g., present at a staff meeting, send an e-mail announcement, invite personally, etc.)

_____

_____

_____

Have you carried out a needs assessment of your audience? Conduct a survey of the participants you recruit and note a few key things about who they are, what they do, what their learning interests are, and what challenges they face when working with patients. A sample needs assessment is provided in Appendix 8.

_____

_____

_____

What is the best time of day or week to ensure the greatest attendance?

_____

_____

_____

5. Organizational Considerations

Have you secured permission from senior leadership? Have they sent out an e-mail or provided you with any other tools to encourage participation? You may also want to consider asking him/her to introduce the session to place the training in the context of broader organizational goals.

_____

_____

_____

Identify staff that can help you with photocopying and other administrative tasks in advance of, and during, the training.

_____

_____

_____

6. Other Considerations

Are there other considerations specific to your practice site that you need to think about as you plan the session? Note them here:

_____

_____

_____

Section 3

Training Your Team:
Developing the Course Content

Once you decide on the course structure, begin to think about the course content. In the following pages, you will find the materials to help you present the MAP concepts and tools:

- **Sample Course Design**
- **Sample Course Agenda**
- **Presentation Guide,** with talking points for each content area described on the agenda. On the MAP CD, you will find PowerPoint presentations that accompany the presentation guide.

The course structure presented here represents the ideal. Time constraints and competing priorities may require you to modify the agenda and limit the time to a one- or two-hour course. Feel free to modify the presentations and emphasize certain pieces of the content that respond best to the interests that your colleagues express in the needs assessment.

However you decide to modify the agenda and the course structure, keep in mind two essential pieces of a successful MAP training:

- Convey the importance of collaborative work with patients, and
- Provide the tools and information that participants need in order to start using the MAP tools effectively in their work with patients.

Once you have completed recruitment and have a list of participants, we recommend having them read the NYC DOHMH *City Health Information* (CHI) "Improving Medication Adherence" before they come to the training. A PDF of the CHI is included on the CD.

MAP Training Design

SAMPLE COURSE DESIGN

Training Goal: To enable providers in busy ambulatory care settings and pharmacies to effectively counsel chronic disease patients to improve their adherence to medication regimens.

Learning Objectives:
Upon completion of this training, participants will be able to:

- Describe the evidence base related to medication adherence and the barriers patients face adhering to their medicine(s).
- Identify strategies for assessing and addressing medication adherence.
- Demonstrate the use of MAP tools to facilitate conversations with patients about medicine-taking.

Symbol Key
In the course Presentation Guide, you will see the following icons used:

TP
Talking points (TP) are suggestions to guide your explanation of a particular process or content piece. Feel free to use your own words and style when you conduct this training.

Tips Tips are presented in dark boxes and provide helpful hints to support your facilitation of the content in that section.

Sample Agenda for MAP Training

Activity	Description	Training Methodology	Time
I. Training Introduction	Welcome & Introductions. Read Training Goal, Objectives & Working Agreements.	Introductory segment with brief group discussion.	15 Minutes
II. Evidence-Based Approaches to Overcome Medication Nonadherence	Lecture on evidence-based strategies to improve adherence, including discussion of the CHI.	Medication Adherence PowerPoint followed by patient and provider testimonial.	60 Minutes
Break			15 Minutes
III. Engaging and Informing the Patient	Building rapport with patients while addressing their medication adherence concerns.	"Fishbowl" practice session.	60 Minutes
IV. Health Literacy	Introduction to health literacy issues.	Health literacy video and discussion.	30 Minutes
Break			15 Minutes
V. Toolkit Introduction	Lecture on MAP key messages and tools for working with patients.	MAP Tools PowerPoint with group participation and discussion.	30 Minutes
VI. Closure	Statement from each participant on how s/he will apply this training in work with patients Remind participants to complete evaluation form.	Group go-round with brief discussion.	15 Minutes
		TOTAL	**4 hours**

If it is not feasible for you to implement a four-hour training session, try one of these alternatives:

- Depending on whom you are training, shorten the length of some of the sessions.
  - You may choose to omit the section on Health Literacy and instead assign the video as homework.
- Schedule several "mini" trainings during which you cover only one topic at a time.
  - For example, schedule a series of three one-hour sessions. The first session is spent introducing the evidence base for medication adherence, the second on communicating with patients, the third on the MAP tools and how to use them.

[1] If possible, we recommend recruiting an enthusiastic patient and one physician champion to speak at the training about their struggles adhering to medications (a patient perspective) and struggles understanding barriers (a physician perspective). If this is not an option, see Appendix 7 for links to testimonial videos produced by the Fund for Public Health in New York. Real-life testimonials proved to be one of the most well-received parts of the MAP trainings.

The shorter agendas below contain the most essential elements of the program as determined by MAP trainers and MAP participants currently using the tools.

Sample Agenda for 90-Minute MAP Training

Activity	Description	Training Methodology	Time
I. Training Introduction	Welcome & Introductions. Read Training Goal, Objectives & Working Agreements.	Introductory segment.	5 Minutes
II. Evidence-Based Approaches to Overcome Mediation Nonadherence	Lecture on basic concepts of medication adherence and recommended strategies to improve adherence.	Medication Adherence PowerPoint presentation and discussion.	20 Minutes
III. Toolkit Introduction	Lecture on MAP key messages and tools for working with patients.	MAP Tools PowerPoint presentation with group participation and discussion.	25 Minutes
IV. Engaging and Informing the Patient	A model framework for building rapport with patients while addressing their medication adherence concerns.	Discussion Time permitting, and short role-play "Fishbowl" exercise.	40 Minutes
		TOTAL	**90 minutes**

Sample Agenda for 30-Minute MAP Training

Activity	Description	Training Methodology	Time
I. Training Introduction	Welcome & Introductions. Read Training Goal, Objectives.	Introductory segment.	5 Minutes
II. Toolkit Introduction	Lecture on tools for working with patients. Lecture should be interspersed as much as possible with information from the CHI and the Medication Adherence PowerPoint presentation.	MAP Tools PowerPoint presentation with group participation and discussion.	25 Minutes
		TOTAL	**30 minutes**

MAP Training Course: Presentation Guide

I. Climate Setting (15 minutes)

1. Welcome participants and ask them to state their name, job title, and what s/he would like to gain or learn from this training. Trainers (you), state your name and job title and briefly share how you became involved with conducting this training *(i.e., how is the training important to you and what is your interest in sharing this information with others?).*
2. State the training goal and objectives.
   Ask if anyone has questions. Review the agenda for the day.
3. Suggest ground rules or working agreements for the group. Examples of working agreements include the following:
   - Use everyone in the room as a source of learning.
   - Participate fully.
   - Honor confidentiality.
   - Listen nonjudgmentally to others.
   - Apply what you learn to your work with patients.

   Ask if anyone has additional working agreements. If so, capture these on a flip chart.

Tips

Set up chairs in a "U" shape or a semicircle to promote maximum group discussion and interaction.

Tips

Training goal, objectives, and working agreements should be posted on flip chart paper.

II. Introduction to Medication Adherence (60 minutes)

Components:
Medication Adherence PowerPoint presentation, Patient Perspective, and Provider Testimonial Speakers

1. Use the Medication Adherence PowerPoint presentation and CHI located on the CD in your MAP toolkit as guides for this activity.
2. The PowerPoint is intended as a 30-minute presentation, but you may wish to edit it based on how much time and content you want to present.
3. Once you discuss barriers, review the evidence-based approaches to improving adherence (listed in the CHI). This will help to ensure that later in the training when you are conducting the "Fishbowl" exercise, participants will have a strong evidence base with which to practice effective communication techniques.
4. Some questions that may facilitate discussion during the presentation include the following:
   - What barriers do patients face when trying to adhere to medication regimens?
   - What barriers do providers face when speaking to patients about adherence?
   - How can health literacy affect medication adherence?

5. **TP:** "Now that we have learned some basics about medication adherence, we will hear from two speakers. The first speaker will give us a patient perspective, and discuss his/her struggles trying to self-manage his/her chronic disease and the second speaker will talk about the physician's perspective–how important it is to communicate with patients about adherence. Note anything that strikes you as interesting, surprising, or important."
6. Even if speakers do not have time to stay for Q & A, follow with a discussion.
   - To facilitate the discussion, pose the questions listed in Appendix 7

III. Engaging and Informing the Patient (60 minutes)

Components: "Fishbowl" exercise

Note: Use information from Part One, Section Three to support you as you train participants to engage and inform the patient.

1. Begin by explaining the "Engaging the Patient-Informing the Patient" communication model.
2. **TP:** "Literature shows that patients who view themselves as partners in their care—and who are actively engaged in their care—have better adherence behaviors and better clinical outcomes. We also know that patients who are satisfied with their provider-patient relationship are more likely to return for follow-up. So building a positive relationship with a patient is important to improving adherence. To build this relationship, use skills that engage and support the patient, while at the same time informing the patient and sharing your expertise with him or her."
3. Trainer addresses the following points:

Tips

Put the "Engaging and Informing" Key Points on flip-chart paper for the group to follow.

- **Engaging the Patient**
  - Begin with the patient's concerns and used active listening technique:
    - Restate facts.
    - Reflect feelings.
    - Use supportive statements.
    - Clarify facts.
    - Validate the patient's feelings and concerns.
  - Ask open-ended questions.
  - Identify the patient's strengths.
  - Be aware of your nonverbal communication (body language).
  - Pay attention to your patient's non-verbal communication.
- **Informing the Patient**
  - Review medications with the patient and inform him or her of possible side effects, special directions for proper use, and cost-saving strategies. Be sure to assess health literacy and comprehension level.
  - Educate the patient on strategies for remembering to take their medications (eg, how to use a pill box, cell phone reminder).
  - Explain how each medication works.
  - Explain the benefits of taking medication.

- Explain the consequences of not taking medication and/or letting a prescription run out.
- Offer resources on how to save on the cost and where to go for help.
- Avoid jargon and explain medical terms.
- Strive to be accurate and concise. Use short, simple sentences.

TP: "The key to effective support is **balancing engaging the patient with informing him/her**. We are now going to show you how this model can work with a patient who is having challenges adhering to their medications."

4. Begin the "Fishbowl Exercise": a fishbowl is a training exercise (sometimes known as a Round Robin Exercise) that helps participants practice a skill and get some useful feedback.
5. Demonstrate an example of a physician and a patient engaged in a discussion about the challenges of taking his medications. One trainer will assume the role of the physician and one trainer will assume the role of the patient.

   Note: A link to a Fund for Public Health in New York video demonstration of the role play is included in Appendix 7. If you are conducting the training alone, watch the video before demonstrating it yourself.

Tips

Modeling will require the participation of two trainers.

6. Distribute the case study and allow the group to read the case example.
7. Trainer instructs the group as follows:

   TP: "You are now going to observe a brief exchange in which a physician will talk to a patient using skills of both *Engaging the Patient and Informing the Patient.* I'd like half of you (trainer will indicate which half) to jot down on paper at which points in the presentation you notice the physician using engaging skills and I'd like the other half to jot down where you see the physician using informing skills."

Tips

This design comes with a handout (on the CD) for participants to record their observations and a copy of the case study.

8. Trainers begin the modeling session during which the "physician" trainer demonstrates skills of engaging the patient and informing the patient. The "physician" should ask Mrs. Lopez, *"What gets in the way of taking your medicines?"*
9. After a few minutes, the trainer stops the demonstration and asks participants to share their observations.

   TP: "For those of you observing **engagement** skills, when did you see the doctor using those skills with Mrs. Lopez? For those of you observing **informing** skills, at which points did you see the doctor using these skills with Mrs. Lopez?"

Tips

Trainers should feel free to coach or assist any participants who appear "stuck" during the fishbowl activity.

10. Inform participants that they will now practice these skills.
11. Pause to review the *Pocket Guide* tool that contains responses to various medication adherence challenges.
12. One of the trainers assumes the role of Mrs. Lopez.
13. Divide the participants into two groups: **participants** and **observers.**

14. Each **participant** will take a turn continuing with the same patient and situation as was demonstrated in the model role play.

    TP: "Toward the end of the dialogue, we saw the physician spending time with Mrs. Lopez and raising a number of concerns in different, useful ways. Each of you will now have a turn at addressing some of Mrs. Lopez's barriers, using engaging and informing skills. Imagine that you are the provider working with this patient and continue the conversation wherever the person before you left off. The tag line we will use is: *Mrs. Lopez, what else gets in the way of you taking your medicines?* Each of you will ask Mrs. Lopez this question, and you should respond using the skills of engaging and informing."

Tips

Give participants approximately 1 minute to practice with Mrs. Lopez before moving on to next person. You can signal that it is time to move onto the next person by waving a scarf in the air or using a whistle.

15. Instruct the **observers** to note the instances when their colleagues use any of the skills of engaging and informing.
16. The practice will continue as described until all participants have had a chance to address a different barrier with the "patient."
17. The trainer will facilitate a discussion by asking the observers the following:

    TP: "Where did you see good examples of the participants using any of the skills of engaging or informing? Which responses did you feel demonstrated these skills particularly well? Do you have any suggestions for how a barrier can be addressed even more effectively or differently?"

18. Ask the **participants**:

    TP: "How did it feel to listen to the patient? Were there moments when you were at a loss for how to counsel the patient? Do you feel you made a breakthrough with the patient? If yes, how?"

19. Ask the **patient**:

    TP: "How did you feel when the doctor spoke to you? Did you feel the doctor cared about and addressed your concerns?"

20. Conclude the practice session by thanking everyone for their work.

IV. Health Literacy (30 minutes)

1. Introduce the topic of health literacy.

   TP: "Research indicates that poor health outcomes are associated with low health literacy in every disease area. **Low health literacy** means that patients are unable to obtain, process, and/or understand basic health information. Consequently, they cannot make appropriate health decisions for themselves. Now we will watch a short video produced by the American Medical Association Foundation that will introduce the topic of health literacy."*

2. Show the group the video **"Health Literacy and Patient Safety: Help Patients Understand."** Ask participants to jot down anything they hear that strikes them as interesting, surprising, or meaningful.
3. Facilitate a discussion about health literacy. Use the questions from this manual's **Part One, Section One** to guide the discussion.

*In order to show the video at the in-person training, you must be able to access the Internet to download it from the Web site free of charge. If this is not possible, you will need to order the video from the AMA Foundation.

If neither of the above is an option for you, we suggest making the video part of a "homework" assignment. It may be easier for participants to download the video on their own computers.

V. Introduction to the MAP Tools (30 minutes)

Use the presentation "MAP Tools" located on the CD as a guide for this activity.

The PowerPoint presentation is intended to be a 15-minute presentation. You may wish to edit the presentation based on how much time and content you want to present. You may chose to focus on one, two, or all of the tools, depending on time constraints and/or the priorities of your care team.

Additionally, take a few minutes to discuss your own experiences with the tools to help motivate participants.

VI. Closure (15 minutes)

1. Recap or review the main points of the training.
2. Ask participants to think of one thing that they will do differently as a result of this training.
3. Ask each person to share his or her response with the group.
4. Conclude by having each participant complete and submit an evaluation of the training. A sample evaluation forms is available as Appendix 9.
5. If applicable, distribute the homework assignment and explain your follow-up plan. (See the following section for how to make a follow-up plan.)

Tips

Be sure to distribute end of training evaluations which are provided in Appendix 9.

Section 4

Training Your Team: **Follow-up**

Congratulations! You completed your first training session. You conveyed to your colleagues the importance of engaging patients in collaborative work on improving adherence, and you introduced them to evidence-based strategies and tools to help them do so.

Now your task is to keep the momentum going.

Evaluate the Training Session

Immediately after you implement the session, assess how it went.

- **Review the day.**
  What went especially well? What would you like to do differently next time? Note down any changes that you intend to make.
- **Review the participant evaluation forms.**
  How closely do the evaluation forms mirror your assessment of the day? Note which components of the training were best received by the participants and consider participants' suggestions for improvement. If participants' feedback differs significantly from your self-evaluation, consider why.
- **Consult with co-facilitators.**
  If you implemented the session with a co-facilitator, review the participant evaluations together.
- **If you have future training sessions scheduled, improve the training based on evaluation feedback.**
  Modify the course while the session is still fresh in your mind.

Follow Up with Participants

It is essential to follow up with participants in order to make sure they are testing the tools and that they are using them correctly. Training without follow-up does not usually work!

Some key ways that you can follow up with participants include:

- **Schedule "check-ins."** Developing a formal schedule for brief check-ins with participants is a great way to make sure that follow-up happens.
- **Email:** Contact participants to remind them to practice using the tools.
- **Homework:** Assign realistic deadlines for when you expect them to turn in homework.
- **Make yourself available:** Make sure participants know they can contact you with questions.
- **Identify "champions:"** Which of the participants were especially energized by the session? Call on those individuals to help you keep MAP fresh in everyone's minds.

Report to Senior Leadership

Let your senior leadership know how the course went. Be sure to include feedback from the participants' evaluation form.

By reporting to senior leadership, you will keep MAP on their agenda. Also, if your experience in facilitating the course highlighted a need for additional resources or for other forms of support, a formal memo will help to make the case. Provide the justification for your "ask" and be sure to describe the course's successes.

Long-term Evaluation

Two methods you may want to consider when conducting a long-term evaluation of the impact of MAP on your patient outcomes are:

- Patient surveys: Randomly sample patients in the waiting room to see if patient-provider relationships have improved after the introduction of MAP at your site.
- Chart reviews: Conduct a chart review at your site to see if better adherence rates are reflected in patient outcomes. Possible outcomes to measure include blood pressure, A1c, or cholesterol level.

While these evaluation methods are labor-intensive, the data collected has the potential to be used to advocate for more time with patients and better reimbursement for preventive services. For more information on how to conduct a formal evaluation, we suggest partnering with a local academic institution or health department, or find examples of successful evaluation projects at www.ahrq.gov.

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APPENDICES

APPENDICES

APPENDICES

Appendix 1
Additional Bibliography

Appendix

Complementing the references used in this manual, these articles may be helpful to you as you focus on improving adherence among your patients. Topics include medication adherence, self-management, and chronic illness care within primary practice settings.

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Appendix 2

Homework Guide

This appendix will help you start using the MAP tools. Ideally, the homework assignments should be carried out over a two-week period.

We encourage you to use these worksheets for as long as you can. They will help you test the tools on an ongoing basis and to discover the best ways of integrating the tools into your practice setting. The worksheets are also a blueprint for working with colleagues on tool integration.

- If you are a staff educator/trainer, this homework guide will help you train your colleagues to use the tools. The following pages should accompany the "Toolkit Introduction" component of the MAP training agenda, which is described in Part 2, Section 3 of the manual.

Homework Assignment: Week 1

Practice using one tool each day, Monday to Friday, with at least one patient a day.

Record your experiences on the worksheet below. Please offer concrete examples of interactions and challenges with patients, as well as general impressions. An example is included as a model for your responses.

At the end of the week, review your experiences and answer the questions below.

Example

Tool	Describe experience / Patient response
Medication List	**How many patients did you use this tool with?** *3* **How did you integrate the tool into the visit?** *Filled out with the patients after the visit with the doctor.* **Describe the experience.** *Took a lot of time. Couldn't fill out for more than 3 patients.* **Characterize the patient response in general & provide specific examples.** *Positive. One patient said now that he understood what his Metformin was for, he would try harder to stick to the regimen.*
"Questions to Ask" Pad	**How many patients did you use this tool with?** *5* **How did you integrate the tool into the visit?** *Assigned my PCA to hand out to all patients today. I then asked patients about it, and 2 asked me questions.* **Describe the experience.** *Good - pad was helpful, and PCA didn't mind the extra duty.* **Characterize the patient response in general & provide specific examples.** *Great. Two patients told me they didn't know they were allowed to ask questions!*

Homework Assignment: Week 1
Practicing the Tools (1)

Tool	Describe experience / Patient response
"Questions to Ask" Pad	How many patients did you use this tool with? How did you integrate the tool into the visit? Describe the experience. Characterize the patient response in general & provide specific examples.
Adherence Assessment Pad	How many patients did you use this tool with? How did you integrate the tool into the visit? Describe the experience. Characterize the patient response in general & provide specific examples.
Medication List	How many patients did you use this tool with? How did you integrate the tool into the visit? Describe the experience. Characterize the patient response in general & provide specific examples.
Pocket Guide	How many patients did you use this tool with? How did you integrate the tool into the visit? Describe the experience. Characterize the patient response in general & provide specific examples.

- Which tool was easiest to use? Why?
- Which tools were more challenging to work into the visit? Why? What are some ways that you could get around these obstacles?
- Think about patients' overall responses to the tools. How would you characterize the response?

Homework Assignment: Week 2
Practicing the Tools (2)

Keep practicing the tools. This week, instead of using only one tool each day, use each tool as often as possible, with a goal of using each tool with at least three patients by the end of the week.

If you have enlisted the help of other staff people to use the tools (e.g., front office staff distributing "Questions to Ask" Pad), please ask them about their experiences and record responses in the space provided, or give them their own worksheets to fill out.

At the end of the week, review your experiences and answer the questions below.

Tool	Describe experience / Patient response
"Questions to Ask" Pad	**How many patients did you use this tool with?** **How did you integrate the tool into the visit?** **Describe the experience.** **Characterize the patient response in general & provide specific examples.**
Adherence Assessment Pad	**How many patients did you use this tool with?** **How did you integrate the tool into the visit?** **Describe the experience.** **Characterize the patient response in general & provide specific examples.**
Medication List	**How many patients did you use this tool with?** **How did you integrate the tool into the visit?** **Describe the experience.** **Characterize the patient response in general & provide specific examples.**
Pocket Guide	**How many patients did you use this tool with?** **How did you integrate the tool into the visit?** **Describe the experience.** **Characterize the patient response in general & provide specific examples.**

- **Describe the differences in your experiences this week, as compared to last week.**

- **Which staff members did you involve in testing out the tools? Characterize the experience overall.**

- **Which staff members would you like to involve in testing the tools? How do you envision their roles?**

- **What are your next steps to making the tools a regular part of practice?**

Appendix 3

FAQs:

Making the Case for MAP at Your Practice

When colleagues ask...

- **How will MAP lighten the workload for us?**
  "By delegating some responsibilities to medical assistants, you'll have more time to talk to patients about their clinical issues. The MAP tools can help your staff to assess medication adherence before you see the patient and that will allow you get started immediately on addressing adherence challenges."

- **How will extra work increase the job satisfaction of other team members?**
  "Assigning front desk staff to distribute the *Questions to Ask* Pad may seem like adding to their workload, but involving them in our patients' care will help them feel part of the care team."

- **How will the MAP tools help to improve patient outcomes?**
  "The practices that the tools encourage have been shown in the literature to improve patient outcomes. For instance:
  - helping patients to set and achieve a goal
  - opening channels of provider-patient communication
  - addressing specific challenges faced by patients, like cost of medicines."

- **How do you not "step on any toes"?**
  Acknowledge that your colleagues have their own ways of working and identify ways the tools can enhance their work. "Let me show you how the Medication List will help you talk through your explanation of your patients' medication regimens. The pictures and table really help to make things clear!"

When senior leadership ask...

- **How will MAP improve the quality of care?**
  "Poor medication adherence is a problem in all chronic disease areas. The MAP tools will help us to address adherence across the board."

- **How can MAP be integrated into other Quality Improvement initiatives that are already underway?**
  "We are already focusing on self-management goal-setting. These tools will enhance the staff's ability to improve patient self-care by focusing on improving medication adherence."

- **Do you have any concrete example of how the tools have improved patient care?**
  "Kathy has been distributing the 'Questions to Ask' Pad at the front desk to all of my patients, and there's been a positive response. Five of my patients yesterday told me they didn't know they could ask me questions about their medicines. Two of these patients had been coming to see me for more than five years, yet they never asked me a question!"

- **Why should we dedicate training time to make MAP practice-wide?**
  "By training all staff–from the receptionist to the medical assistant to nurses, doctors and pharmacists–MAP will become a regular part of practice. We'll see improved clinical outcomes among our patients much sooner if the whole staff is involved."

- **How much will MAP cost?**
  "The MAP tools are free, and if given sufficient protected time for training we can train our own staff. This makes it a very low-cost project.

Appendix 4
Additional Quality Improvement Resources on the Internet

Agency for Healthcare Research and Quality (AHRQ) www.ahrq.gov

AHRQ is the branch of the US Health and Human Services (HHS) dedicated to Quality Improvement. AHRQ offers tools, training, and research to help you make changes in practice, and many of the toolkits are free of charge.

Commonwealth Fund www.commonwealthfund.org

The Commonwealth Fund publishes reports and analyses of health care Quality Improvement policies, pilot initiatives, and programs. Commonwealth also offers analysis of many other current topics in health care.

Improving Chronic Illness Care (ICIC) www.improvingchroniccare.org

Dr. Ed Wagner, known as the architect of the Chronic Care Model (CCM), is the founder of this Robert Wood Johnson Foundation-supported organization. ICIC offers guidance and coaching intended to change the way primary care practice is organized and delivered. The Web site offers a list of resources for easy access.

Institute for Healthcare Improvement (IHI) www.ihi.org

IHI runs collaboratives nationwide and offers courses in a number of US cities, each of which focuses on the needs of different groups and institutions that are trying to improve the delivery of health care. Although participation in IHI's courses and conferences can be quite costly, free access to certain conference calls and Web-based tools and resources are offered on the site.

National Committee for Quality Assurance (NCQA) www.ncqa.org

NCQA is a national organization focused on quality measurement. NCQA offers several recognition programs to health centers that achieve excellence in different areas of patient care.

Primary Care Development Corporation (PCDC) www.pcdcny.org

PCDC is a leader in coaching and consulting related to practice redesign in urban health centers. While PCDC works nationwide, its resource section is especially useful for organizations in New York City.

Patient-Centered Primary Care Collaborative (PCPCC) www.pcpcc.org

PCPCC is leading the transformation of health care centers into "patient-centered medical homes" through the application of Quality Improvement techniques and tools.

Appendix 5

NYC DOHMH Public Health Detailing Program

The NYC DOHMH Public Health Detailing Program works with primary health care providers to improve patient care around key public health challenges. Department of Health and Mental Hygiene (DOHMH) representatives promote clinical preventive services and chronic disease management through the delivery of brief, targeted messages to doctors, physician assistants, nurse practitioners, nurses, and administrators at their practice sites. “Detailing Action Kits”—containing clinical tools, resources for providers, and patient education materials to promote evidence-based best practices–are distributed during visits. Modeled after the pharmaceutical sales approach, the Public Health Detailing Program builds on the DOHMH's extensive experience in medical provider education, health care Quality Improvement, and community-based health promotion.

The Public Health Detailing Program is organized around specific clinical topics, chosen largely because of their anticipated impact on morbidity and mortality. For example, the focus of the February 2010 detailing campaign was medication adherence. A number of the tools developed for this campaign are based on MAP tools, with help from the Cardiovascular Disease Prevention and Control Program. This kit contains additional tools (some pharmacy-specific) that can also help your site improve adherence for patients with chronic disease. Tools from this kit, and other Public Health Detailing kits, can be found at:

http://www.nyc.gov/html/doh/html/csi/csi-detailing.shtml

Appendix 6

NYC DOHMH Cardiovascular Prevention & Control Program

Appendix

The DOHMH Cardiovascular Disease (CVD) Prevention and Control Program seeks to reduce CVD burden and to eliminate related health disparities in New York City through multifaceted approaches that promote community awareness of the condition, improve disease management, ensure the availability of services and programs, and address the risk factors underlying much of CVD. The program's work includes creating sustainable citywide heart-healthy changes in the food environment, increasing the diagnosis and control of CVD and related risk factors, specifically hypertension and high cholesterol, and promoting the prevention and successful management of disease through community initiatives focused on patient disease self-management and out-of-office blood pressure monitoring. More information about DOHMH CVD can be found at www.nyc.gov/heart.

Appendix 7
MAP Videos

Links to four supplemental videos for the Medication Adherence Project can be found on The Fund for Public Health Web site:

http://www.fphny.org/p_csi.php

The videos and the questions below will enhance your understanding of adherence issues faced by both the patient and the provider. As a trainer, the videos will also help you to make your training sessions more interactive and engaging.

1. A role play between a provider and patient, modeling a brief, effective conversation about medication adherence; and
2. A "fishbowl" demonstration and exercise for use with Part 2 of this manual.

Video #1 The Patient Perspective:

This 13-minute video will introduce you to Jacqueline Fox-Pascal, a Deputy Program Director in the DOHMH's Bureau of Chronic Disease Prevention and Control. Ms. Fox-Pascal's role is to help clinicians and community groups to implement effective public health programming. However, when Ms. Fox-Pascal was diagnosed with type 2 diabetes, she discovered how difficult it was to practice what we health professionals preach.

Don't skip this video! MAP participants reported that this segment was the most valuable component of the training.

After you watch the video, consider the following questions and jot down your answers in the space provided. Refer back to these impressions as you begin working with the tools.

1. What were your initial reactions to Ms. Fox-Pascal's presentation?

2. What barrier(s) challenged her the most? Were any barriers surprising to you?

3. What were your "takeaways" from this segment?

For instance, some MAP participants were struck by how difficult it is for patients to eat healthier when they have multiple diseases; some were surprised by Ms. Fox-Pascal's self-diagnosis of depression; others had never thought about the logistical challenges involved in filling 90-day vs. 60-day prescriptions.

Summary Points

- Even health professionals who know how important it is to take medicines can be derailed by the difficulties of medication adherence.
- Undiagnosed clinical depression made it difficult for Ms. Fox-Pascal to take care of herself; and when she failed to adhere to clinical advice, she felt worse–exacerbating the downward spiral caused by her depression.
- Some of the barriers Ms. Fox-Pascal faced included:
  - **Forgetfulness:** A busy life and career prevented Ms. Fox-Pascal from remembering to take her pills at the correct times.
  - **Complexity of regimen:** Ms. Fox-Pascal chose to simplify her regimen herself. She took some of her doses at the same time in the day, so that she would not forget them later.
  - **Side Effects:** Morning doses, when taken before eating, made her sick.
  - **Logistical challenges:** Insurance issues made it difficult for her to fill all of her prescriptions at once; she risked missing doses because she had to make multiple trips to the pharmacy.
  - **Depression:** Depression affects a large proportion of chronic disease patients. When undiagnosed, depression is debilitating, resulting in lower medication adherence and poorer clinical outcomes.

Video #2–Provider Testimonial:

In this 10-minute video, primary care physician Dr. Jennifer Adams reflects on her experience understanding patient barriers to adherence.

After you view the video, consider the following questions, and jot down your answers in the space provided. Refer back to these impressions as you begin working with the tools.

1. Could you relate to Dr. Adams' experience with her first patient? Have you ever had a similar experience?

2. If so, how did you deal with it? If it happened to you today, would you deal with it any differently?

3. What were your "takeaways" from this segment?

Video #3: Role-Play Demonstration

This 5-minute video of patient-provider interaction is intended to demonstrate that even in a short office visit, providers can engage their patients and help them to set small, realistic goals, which will in turn, help patients to better self-manage their chronic disease.

Video #4: "Fishbowl" Exercise and Demonstration

Also known as a Round Robin Exercise, this video will demonstrate a helpful way to practice the engaging and informing skills that you learned about in Part One of the manual.

Be sure to watch the video before conducting your MAP training.

Appendix 8
Sample Needs Assessment Form

For each question, please check all responses that are applicable, and fill in blanks as appropriate.

1. Title (MD, RN, PA, etc.): _____

2. Do you review medications with a patient? If so, how?

- ☐ Ask patient to bring in all of his or her medications.
- ☐ Ask patient to list what medications he or she is taking.
- ☐ Use medical records to review medications.
- ☐ Other: _____

3. Please estimate what percentage of your patients you think adhere to their medication regimen most (>80%) of the time._____%

4. When prescribing a new medication, how do you instruct your patients to take them?

- ☐ Verbally
- ☐ With written instructions
- ☐ Pharmacist/other care team member does it
- ☐ All of the above

4a. Do you or any member of your staff follow up with patients to make sure they are taking medications correctly?

- ☐ Yes
- ☐ No

4b. If so, how does your office follow up?

- ☐ Phone call
- ☐ Letter
- ☐ Ask at next visit
- ☐ Other: _____

5. What are some of the challenges you face convincing your patients that it is in their best interest to adhere to their medication regimens?

- ☐ Time
- ☐ Too much paperwork
- ☐ No system in place to ask or follow up
- ☐ Health literacy/language issues with patient
- ☐ Other:

6. What knowledge and/or skills would you like to gain from this training?

_____

Appendix 9
Sample Training Evaluation Form

Appendix

The following are some basic evaluation questions used in previous MAP trainings. We encourage you to make the form your own by including questions that are more specific to your site and/or your audience.

Position:

- ☐ Physician
- ☐ PA
- ☐ MA; PCA
- ☐ Nurse Practitioner
- ☐ Nurse
- ☐ Social Worker
- ☐ Health Ed.
- ☐ Other: _____
- ☐ Pharmacist

1. How would you rank MAP's achievement in reaching its overall educational objectives?
1 = Excellent, 2 = Good, 3 = Fair, 4 = Poor, 5 = Unsatisfactory

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

2. Do you feel better prepared to counsel patients about adherence?

☐ Very prepared ☐ Somewhat prepared ☐ Not any more prepared ☐ Too soon to tell

3. Have the tools helped you to better convey information to your patients?

☐ Yes (if so, how?) ☐ No

4. Do you have any recommendations to improve any of the tools?

5. How effective was the facilitator in communicating the information?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

5. How was the space for the activity?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

6. How were the audio-visual aspects of the activity?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

7. Do you have any recommendations to improve this training?

_____


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