Medication Adherence
Practice e-Toolkit - January 2017

Improving Hypertension and Diabetes Care & Prevention Project
Overview

Introduction to Medication Adherence

The adherence literature base is large and growing as an increasing number of researchers address this issue and its complexities. The excerpts below are from the Medication Adherence Project (MAP) Took Kit, which was developed and implemented by the New York City Department of Health and Mental Hygiene, with help from the Fund for Public Health in New York. The project responded to the needs of clinicians and pharmacists working in busy primary care practices serving patient populations affected by multiple chronic diseases.

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. Additional research indicates:

- 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);
- Non-adherence 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).

Engage Patients

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

- 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).
- Helping your patients understand why adherence is important and how they can collaboratively work with you to improve it makes the management of their disease more successful with better outcomes.
Improving Medication Adherence

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).

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 and should be part of a team approach with all care givers (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).

Non-adherence Costs

Non-adherence 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).

Pharmacist Intervention in Hypertension Medication Adherence

Three hundred and eighty-five hypertensive patients were randomly assigned (192 in the control group and 193 in the intervention group) to the study. No significant differences were observed in either group
for age, gender, income, locality, education, occupation or duration of disease. There was, however, a significant increase in the participants' levels of knowledge about hypertension and medication adherence among the interventional group after completing the intervention. Significantly lower systolic and diastolic blood pressure levels were also observed among the interventional group after completion of the intervention. Read more.

**Million Hearts: Improving Medication Adherence Among Patients with Hypertension**

Medication adherence is critical to successful hypertension control for many patients. However, only 51 percent of Americans treated for hypertension follow their health care professional’s advice when it comes to their long-term medication therapy. Adherence matters, click here for additional information.

**Apps**

**5 Apps that Improve Medication Adherence**

As a healthcare provider, you’ve probably struggled to boost medication adherence and your patients may forget to take their medication on time or can’t manage to keep their multiple medications straight. Some patients may even end up in Urgent Care Centers or the Emergency Room when simple problems aren’t treated properly. They may also be readmitted back to the hospital when medication adherence stops at discharge. Since a majority of patients are now smartphone users, mobile apps can assist with non-adherence. We sorted through the hundreds of smartphone apps available and selected five that may be helpful. Click here to learn about these five apps.

**Events/Podcast**

**Taking Our Medicine — Improving Adherence in the Accountability Era**

In a multimedia *New England Journal of Medicine* report addressing the issue of medication adherence, Senior Fellow Lisa Rosenbaum is both the author and subject of an accompanying 18 minute audio interview with Stephen Morrissey, *NEJM* Managing Editor. She predicts that the implementation of the Affordable Care Act with its new incentive and payment systems “will pressure physicians to help patients to adhere to chronic-disease treatments... with their salaries indirectly tied to patients’ behavior, physicians in accountable care organizations and patient centered medical homes will theoretically be more motivated to educate patients about medication therapy and to address barriers to its use.” Learn more.

**Stories from the Field**

**Quality Family Physicians takes Medication Adherence to a New Level**

As the name implies, providing high quality family medical care is an important goal for our highlighted practice located in the heart of Hockessin Delaware. Quality Family Physicians has utilized electronic medical records since the office first opened in 1999 and have won numerous awards for excellence in patient care through their use of healthcare technology. Their primary concern is the importance of the doctor-patient relationship and working together to improve and maintain their patient’s health. The
practice has implemented two new workflows to address patient medication adherence and uses the care team to improve adherence:

- Insurance companies and pharmacies provide the practice a list of patients not adhering to their medications prescribed. The Care Coordinator then calls these patients to address issues and concerns.
- If the patient is prescribed a new medication, or has a medication change, the Care Coordinator will call the patient at 1 week or 2 weeks post initiation of the medication (depending on the medication prescribed). The Care Coordinator assures that the patient understands the reason for the medication, inquires if the patient has any side effects, and is able to take the medicine as prescribed.

If you are interested in exploring new medication adherence workflows in your practice, please contact Ashley Biscardi. The Quality Insights team is here to facilitate these workflow changes within your practice at no cost.

Videos

Medication Adherence: We didn’t ask and they didn’t tell
American College of Physicians created two videos for health care professionals. Patients share their experiences with medications, including reasons why they chose not to take their medicine as prescribed. Patients also discuss their relationships with health care providers and provide them with suggestions to improve adherence. Learn more about patient reasons for not taking their medications as prescribed.

Click here to learn more about patient thoughts on what providers can do to improve medication adherence.

Webinar Recordings & Resources

Medication Adherence: Strategies for Improving Outcomes Webinar
Medication non-adherence has a significant impact on healthcare cost and patient outcomes. In order to manage this complex problem, especially in the community pharmacy setting, payers, employers and healthcare providers rely on the expertise of pharmacists to improve medication adherence rates.

In this recorded webinar hosted by Quality Insights, guest speaker Andrea Williams, RPH, MBA, President of RX Consultants in Wilmington, DE, addresses barriers to successful medication adherence, patient coaching and interviewing techniques, “best practices”, notable pharmacist interventions and medication adherence assessment tools. A case study of a diabetic patient with multiple co-morbidities is presented during the webinar. Watch the recording of this webinar now.
**Best Practices in Monitoring Medication Adherence for Specialty Pharmacy**

This webinar provides a close-up look at the methods used by one of America’s largest specialty pharmacies to ensure optimal patient adherence.

When specialty pharmacy patients do not adhere to their prescribed regimens, it often leads to further complications for the patient...higher costs for payers... and strained relationships between your pharmacy and the manufacturer.

Join specialty pharmacy expert, Mike Crowe, of Diplomat Specialty Pharmacy, as he outlines the key steps on how to obtain better medication adherence in your pharmacy. [Click here](#) to watch the recording of this webinar.

**Empowering Patients to Take Their Medicine: What Can They Do?**

This presentation held by the National Diabetes Education Program Webinar Series takes a look at the scope of the problem related to medication adherence, some of the main obstacles, intentional and unintentional, and ways to improve adherence. [View the slide deck](#) from this presentation.

**Improving Medication Safety from the Patient’s Perspective - Session Three: Improving Medication Adherence**

This Institute for Healthcare Improvement presentation demonstrates that medication adherence is important, but is not sufficient, for good health and health care; social, behavioral, and environmental factors have a huge impact on health.

The presentation highlights the factors that contribute to poor adherence to medications, methods for enhancing medication adherence, and that medication adherence should always be addressed in the context of medication optimization and shared decision-making – including the role of lifestyle factors.

[Click here](#) to download the presentation slide deck.

**Medication Adherence Events**

**Script Your Future Medication Adherence Team Challenge**

Script Your Future is a national campaign to raise awareness about the importance of medication adherence as a vital first step toward better health outcomes. In partnership with more than 100 public and private stakeholder organizations, the campaign provides tools to help patients and healthcare professionals better communicate about ways to improve medication adherence.

While the sign-up deadline has passed, practices can still participate on an individual practice level basis. [Learn more](#).