

## Advancing Medicine Adherence With a Focus on Multiple Chronic Conditions: The New Adherence Action Agenda

Although there has been significant progress in the nation’s collective actions to address the pervasive and costly problem of poor medicine adherence, this is not a time for congratulations. Despite a national investment in public education and model programs, new resources for health professionals, important research efforts and a range of policy initiatives, the reality is:

- Between 20% and 30% of prescriptions are never filled by patients
- Up to half of the estimated 187 million Americans who take one or more prescription medicines – or up to 93.5 million patients – do not take these drugs as prescribed;
- Nonadherence, along with suboptimal prescribing, drug administration, and diagnosis, is associated with an estimated \$290 billion per year in avoidable medical spending or 13 percent of what the nation spends annually on health care; and
- And the immediate future portends escalating rates of multiple concurrent conditions where patients tend to have more than one prescriber, are prescribed multiple medications, and are at increased risk for drug interactions, adverse events and medication errors.

What these facts make clear is that poor adherence and higher rates of multiple chronic conditions are inextricably linked and together, represent a potentially major public health threat. Contributing to this problem is the increasing challenge of a fragmented health care system, especially as it applies to the growing number of older adults being treated for multiple chronic conditions. Also contributing to this complex problem is the interplay of a number of adherence barriers, from the complexity of the drug regimen and the cost-control measures implemented by payers and health systems to the need for patients to visit multiple pharmacies to fill different prescriptions, poor communication between patients and clinicians, and the breakdown in provider communications during the transition to care from the hospital to the outpatient setting. All of these problems contribute to more medication errors, poor health outcomes and higher health care costs and all must be addressed.

Because the stakes are so high, NCPIE commenced a new initiative called the *Adherence Action Agenda* or the “A<sup>3</sup> Project,” bringing together 22 professional societies and voluntary health organizations, government agencies and industry leaders to identify the major gaps in current adherence efforts and create a new *Adherence Action Agenda* for the nation. Intended to accelerate progress in appropriate medicine taking, this new roadmap calls for an increased focus on the growing challenge of multiple chronic conditions where the need for patient adherence is particularly pressing and offers realistic solutions for improving medication adherence through improved care coordination, harnessing new technology and supportive government policies.

Ultimately involving the support and active participation of many constituencies – the federal government, state and local government agencies, professional societies and healthcare practitioners, health educators and patient advocates – this platform calls for action in the following areas:

**1. Establish medicine adherence as a priority goal of all federal and state efforts designed to reduce the burden of multiple chronic conditions.**

It is well documented that Americans with multiple chronic conditions take more prescription and OTC medicines than any other group, often see multiple physicians to treat their diseases, and grapple with taking complex cocktails of different medicines correctly. Yet, patient adherence is not viewed as an essential element of government initiatives to reduce the burden and impact of multiple chronic conditions. For example, the new HHS Multiple Conditions Strategic Framework identifies four strategic areas as policy priorities, all of which should be areas where medication adherence plays a critical role: 1) fostering health care and public health system changes to improve the care of people with MCC; 2) maximizing the use of proven self-care management and other services among patients with multiple conditions; 3) providing better tools and information to health care, public health, and social services workers who deliver care to patients with MCC; and 4) facilitating research to fill knowledge gaps about, and interventions and systems to benefit, individuals with multiple chronic conditions.

However, currently, the HHS Multiple Conditions Strategic Framework mentions adherence within the context of self-care management and better tools and information for health professionals, but does not integrate adherence in plans to improve health systems change and facilitate new research efforts. Therefore, changing the mindset of policymakers so they recognize the interconnectedness of medicine adherence and managing multiple chronic conditions is essential if the resources committed to reducing the burden of multiple chronic conditions are to be successful.

**2. Establish the role of the patient navigator within the care team to help patients with multiple chronic conditions navigate the health care system and take their prescription medicines as prescribed.**

Beginning in 1990 when Harlem Hospital first started using patient navigators to guide patients through the maze of the health care system, these health professionals have been utilized at hospitals and cancer clinics nationwide to help patients coordinate their treatment. Because this model has been successful in improving cancer outcomes, the same concept can be applied more broadly to pairing high-risk patients who have multiple chronic conditions with a patient navigator, who will be responsible for obtaining the patient's medical records, creating an accurate medication list, understanding the patient's medication regimen, setting up medication counseling, as needed, scheduling timely follow-up physician visits, and facilitating communication between the patient and his or her different physicians. In the case of patient navigators now working with cancer patients, many are specially trained nurses, nurse practitioners and social workers, which is in line with the Transitions Coaches now working in hospitals across the country to assist patients when leaving the hospital setting. However, clinical pharmacists, who are unencumbered from dispensing functions, and may already have unique training and credentials, would be well suited to play this role as would geriatric pharmacists. Extensive information about the role of the patient navigator now exists that can be utilized to establish this new and important role for patients with MCC.

**3. Promote clinical management approaches that are tailored to the specific needs and circumstances of individuals with multiple chronic conditions.**

Today, the heaviest burden of MCC is borne by Americans aged 65 and older, where as many as three in four seniors are being treated for multiple concurrent illnesses. Not only do these individuals differ in the severity of their illnesses but they differ in their prognosis, functional status, and treatment preferences, meaning their treatment options will differ and require more flexible approaches to care. Accordingly, NCPIE encourages health professionals to adopt the American Geriatric Society's guiding principles for treating older adults with three or more diseases, *Patient-Centered Care for Older Adults with Multiple Chronic Conditions: A Stepwise Approach from the American Geriatrics Society*, which calls for a "stepwise approach" to making complex clinical management decisions,

starting by eliciting and incorporating patient preferences and choosing therapies that optimize benefits and minimize the harm for older adults with MCC.

**4. Incentivize the entire health care system to incorporate adherence education and medication support as part of their routine care for MCC patients.**

Although most research on appropriate medication use focused on the characteristics that predict poor prescription medicine adherence, there is general consensus that improved patient adherence results from interventions that: increase patient understanding of their conditions and the importance of taking medicines as prescribed; teach the skills so patients can manage their treatment regimens; and create the environment that supports and maintains medication adherence. Here, a number of important initiatives are underway to arm patients with adherence information and personalized tools, such as refill reminders and pharmacy messaging programs.

But to fully engage patients in the importance of medication adherence, a growing body of research suggests that the quality of the interactions between patients and their healthcare providers is critically important for how well patients manage their chronic conditions. Accordingly, a critical need is to expand the role that physicians/other prescribers and other members of the care team play in promoting shared decision-making about the treatment plan and encouraging patients to take their drugs as prescribed. Towards this end, stakeholders are calling for a significant investment in developing the patient/provider education and engagement tools so clinicians will be able to implement best practices for medication adherence; effectively communicate to their patients the importance of following treatment plans; and provide medication support services to patients and family caregivers.

**5. Eliminate the barriers that impede the ability of patients with multiple chronic conditions to refill their prescription medicines.**

Some of the reasons patients fail to take their medicines as prescribed are time constraints and transportation challenges, problems that are magnified for those with multiple chronic conditions who are prescribed different drugs for their disorders by different physicians. This can mean refilling drugs at different times, sometimes at different pharmacies, having to keep track of the refill schedules, and making a number of trips to the pharmacy to pick up their medicines. To reduce these obstacles, stakeholders support simple policy changes that will streamline how prescriptions are dispensed to patients in the pharmacy. One change is to adopt the “pharmacy home” model now in use for North Carolina Medicaid beneficiaries, which gives patients a single pharmacy point of contact for filling prescriptions so they don’t have to visit multiple pharmacies to fill different prescriptions. Another and related change is for pharmacies to adopt refill synchronization, which allows patients to fill their different prescriptions at one time and therefore, reduce the number of visits they must make to the pharmacy. Refill synchronization also facilitates the adoption of an appointment-based model for improving comprehensive medication management services, if needed. According to NEHI, these kinds of actions will improve the “medication ecosystem,” increasing care coordination between prescribers and dispensing pharmacies and ensuring patients with multiple medications receive coordinated and consistent care.

**6. Reduce the cost-sharing barriers for patients by lowering or eliminating patient copayments for prescription medicines used to treat the most common chronic diseases.**

Research makes clear that the cost of medications is a significant barrier to patients filling their prescriptions and taking their medicines as prescribed. Moreover, studies confirm that reducing cost-sharing barriers for patients, such as cost-control measures implemented by payers and health systems, increases medication use and improves adherence. Accordingly, stakeholders advocate adopting policies that will reduce the out-of-pocket costs for medications, especially for patients on multiple prescriptions for chronic conditions.

**7. Accelerate the adoption of new health information technologies that promote medication adherence.**

Significant innovations in health technology, from electronic reminder devices and pharmacy-based adherence messaging programs to electronic pillboxes, smartphone apps, health-monitoring devices that transmit data directly to patients' smartphones to physicians and "e-prescribing," now arm patients with the tools to take their medicines as prescribed and improve the flow of timely and complete information on medicine use between patients and providers. To achieve the promise of these technological developments, stakeholders have outlined a number of immediate steps that are supported by NCPIC and the members of the A<sup>3</sup> Project. These actions are to:

- Adopt new standards for the use of electronic health records standards that provide for consistent data collection, ease of use and provider access to the comprehensive electronic medication information for a given patient;
- Create incentives for providers to use health information technology to identify patients at risk for poor medication adherence;
- Promote patient-provider and provider-provider sharing of electronic health records while ensuring patient privacy; and
- Expand the use of electronic reminders and personal health records to improve medication adherence and optimal use by consumers.

**8. Establish medication adherence as a measure for the accreditation of healthcare professional educational programs.**

Currently, the nation's medical residency programs are moving towards a "next accreditation system," where all medical residents will be evaluated based on their competencies in six core areas, including patient care, systems-based practice and their interpersonal skills and communication. From the standpoint of medication adherence, the move to a new system of outcomes-based graduate medical education represents an important opportunity to integrate evidence-based prescribing, especially for geriatric patients and collaborative medication management strategies to support adherence into the curriculum, especially to develop the clinical skills needed for team-based care and care coordination.

At the same time, this approach can form the basis for integrating behavioral counseling and communications skills with patients – including cultural competencies, identifying patients at high risk for nonadherence, motivational interviewing, and how to work in a multidisciplinary environment with clarity in roles – as core competencies within the curriculum of schools of pharmacy, nursing, and other allied health professions and including skills-based competency in adherence as a measure for accreditation.

**9. Address multiple chronic conditions and optimal medication management approaches in treatment guidelines.**

Today, most clinical practice guidelines focus on managing a specific chronic condition and do not take into account the presence of MCC. The result is that physicians following different clinical practice guidance for each diagnosis lack the evidence-based information to account for the cumulative effect of multiple diseases occurring simultaneously and the interaction among recommended therapies that may prove harmful. To address this situation, NCPIC encourages medical societies to accelerate the development of evidence-based treatment guidelines where information on the most common comorbidities clustering with the incident chronic condition is included – a major goal identified in the HHS Multiple Conditions Strategic Framework. An immediate priority is to include information on the clinical management of the most prevalent dyads and triads identified by the Centers for Medicare and Medicaid Services (CMS) where patients are

likely to be taking a variety of different drugs and may be receiving conflicting advice from prescribers and other healthcare providers.

**10. Stimulate rigorous research on treating people with multiple chronic conditions, including focused research on medication adherence to promote the safe and appropriate use of different medicines in this patient population.**

Today, patients with multiple chronic conditions are being treated with drugs that are usually developed and tested in people who have a single condition. Thus, there is a paucity of evidence-based data on how to treat those with two or more concurrent diseases, especially to safeguard against prescribing drugs for one condition that may have negative effects on coexisting conditions and may interact with other treatments. To address this serious challenge, the HHS Multiple Conditions Strategic Framework calls for a range of new research efforts to expand information on the most prevalent clusters of MCC, identify those care models that are most successful in improving the health outcomes of patients with MCC, and define the most appropriate health outcomes for these individuals in light of the cumulative effect of having a constellation of different diseases. Moreover, the recently established Patient-Centered Outcomes Research Institute (PCORI) has identified research on multiple chronic conditions as part of its National Research Agenda and Research Priorities.

Clearly, these are important steps in the right direction but questions remain about the level of funding to implement the HHS Multiple Conditions Strategic Framework and the timing and resources PCORI will invest in MCC through its research agenda. Of added concern is to what extent the government's research efforts will address medication adherence as an essential element of caring for Americans with multiple chronic conditions. Therefore, as the research agenda is being shaped, NCPIE and the members of the A<sup>3</sup> Project call for incorporating medicine adherence throughout the MCC research agenda with the goal of determining:

- What is known about adherence to multiple medications within the context of treating patients with MCC;
- What existing evidence-based approaches to improving medication adherence are applicable to patients with multiple concurrent diseases; and
- What are the gaps in the scientific literature on enhancing medication adherence that must be addressed if the health outcomes of individuals treated simultaneously for two or more conditions are to significantly improve.

For the growing number of Americans now grappling with multiple chronic conditions, these research efforts cannot start soon enough.

## **This Is the Time for Renewed Action**

Even as the issue of taking medicines as prescribed has become a priority concern for the public health community, nonadherence in the U.S. is compounded by escalating rates of multiple chronic conditions, especially among the growing number of patients who are prescribed numerous drugs on a daily basis, often see more than one prescribing physician, and are at significantly higher risk for drug interactions, adverse events and medication errors. Thus, now is the time for collective action to confront the combined threat of poor prescription medicine adherence and higher rates of multiple chronic conditions – before the predicted increase and impact of multiple chronic conditions overwhelms our health care system.

While no single strategy will solve this difficult challenge, it is hoped that the priorities identified in this

new *Adherence Action Agenda* will serve as a catalyst for action and offer realistic recommendations for improving patient adherence to reduce the burden of chronic disease.