October 2013 is NCPIE’s 28th annual “Talk About Prescriptions” Month (“TAP” Month). The theme for this year’s TAP” Month is “Be Medicine Smart.” If this theme seems familiar, that’s because it is a updated variation of a previous NCPIE “TAP” Month theme – some things just bear repeating!

The focus for “TAP” Month 2013 - - improving medication adherence -- is a core value of medication safety and appropriate medicine use. During” TAP” Month, on October 15, 2013, NCPIE will launch a new national campaign called the Adherence Action Agenda (The A^3 Project), with a particular emphasis on the need to call attention to and address improving adherence by Americans suffering from multiple chronic conditions (MCCs). Check back as October 15 approaches for details about a dedicated web-based A^3 platform and new educational resources for use year-round. Until then, this document contains numerous resources and hot links to help you get your 2013 “TAP” Month program started.

**Why Focus on Multiple Chronic Conditions (MCCs)?**

The following Q and A’s, derived by NCPIE from a recent article by then VADM Regina M. Benjamin, Surgeon General, help put a human face on this growing problem:

**Q:** Why should NCPIE focus on multiple chronic conditions?

Almost half of the American population suffers from chronic illness, the leading cause of death and disability in the U.S. Defined as conditions that last a year or more and require ongoing care and/or limit activities of daily living, chronic conditions include hypertension, respiratory diseases, arthritis, heart disease, diabetes, cancer, and dementia, among others.

**Q:** What is the scope of multiple chronic conditions in the US?

Almost one in four Americans (approximately 75 million people) have *multiple* chronic conditions (MCCs). It is not uncommon in today's hospitals and outpatient clinics for clinicians to examine and treat patients with five, six, or even seven chronic conditions. Remarkably, older adults with five or more chronic illnesses have, on average, 50 prescriptions filled, see 14 different physicians, and make 37 physician office visits per year.
Q: What is the health impact of multiple chronic conditions (MCCs)?

As individuals accrue more chronic conditions, health quality outcomes are reduced. Individuals with MCCs have higher mortality rates and suffer from poor functional status sooner than people with fewer chronic conditions.\(^3\,\!\,^4\) They more frequently experience unnecessary hospitalizations, particularly for ambulatory-sensitive conditions, and more commonly experience adverse drug events. They also report receiving conflicting medical advice, duplicative tests, and more services.\(^5\) Thus, individuals in this population are particularly vulnerable to suboptimal quality care.\(^5\) This makes coordination of care more difficult, yet increasingly critical for this heterogeneous population.

Q: What about the economic impact from MCCs?

The issue of MCCs also includes the associated substantial economic burden on the U.S. Of total health-care spending, 65% is on care for this population. Patients with more than one chronic condition account for 95% of all Medicare spending; those with more than five chronic conditions account for two-thirds.\(^3\,\!\,^6\) Virtually all of the highest cost Medicaid beneficiaries have a complex mix of comorbidities and psychosocial needs.\(^2\) Predictably, health-care spending in general and total out-of-pocket spending increase with the number of chronic conditions present.\(^2\)

Q: Why the poor health outcomes and high costs associated with MCCs?

First, there is limited understanding of what constitutes optimal care of this burgeoning population. The majority of clinical guidelines do not contain specific recommendations for patients with comorbid conditions, so clinicians tend to follow several single-disease-specific guidelines, increasing the risk of adverse drug events and disease-disease interactions.\(^8\) The extent to which this population is included in clinical trials is also unclear.\(^9\) In addition, this population is extremely heterogeneous, yet epidemiologic research to determine the most prevalent subgroups of individuals with specific combinations of chronic conditions is limited.

Many health professionals feel their training did not adequately prepare them in competencies essential to the care of individuals with MCCs such as chronic pain, nutrition, medication management, self-care management, and interdisciplinary care.\(^10\) Even if they were prepared, there are few provider incentives in the current health-care financing system for care coordination and disease management across multiple conditions. Finally, it is unclear whether the benefits of self-care management, including in-home and community-based services designed to help individuals better manage their conditions, are being fully realized.

A Shared Responsibility / Role for All

Given that this is such an important issue, the U.S. Department of Health and Human Services (HHS) has developed a strategic framework to achieve optimum health and quality of life for individuals with MCCs.\(^11\) Though HHS seeks to bring awareness to these complex patients, understanding and treating their diverse needs is a shared responsibility.
NCPIE concurs with the Surgeon General that we must act now to optimize the health and quality of life of people with MCCs. As does Dr. Benjamin, NCPIE also urges clinicians, researchers, and public health practitioners to champion this urgent initiative as we work to provide effective care in our health system and improve the health of our nation.


REFERENCES


FACTS about Multiple Chronic Conditions (MCCs)

As a nation, 75% of our health care dollars goes to treatment of chronic diseases. These persistent conditions—the nation’s leading causes of death and disability—leave in their wake deaths that could have been prevented, lifelong disability, compromised quality of life, and burgeoning health care costs. [http://www.cdc.gov/chronicdisease/index.htm](http://www.cdc.gov/chronicdisease/index.htm)

**Chronic Diseases are the Leading Causes of Death and Disability in the U.S.**

Multiple Chronic Conditions (MCCs)

- Approximately one in four Americans has MCC, including one in 15 children.1
- Among Americans aged 65 years and older, as many as three out of four persons have MCC.1 In addition, approximately two out of three Medicare beneficiaries have MCC.2
- People with MCC are also at increased risk for mortality and poorer day-to-day functioning.
- MCC are associated with substantial health care costs in the United States. Approximately 66 percent of the total health care spending is associated with care for the over one in four Americans with MCC.1
- As an individual’s number of chronic conditions increases, the individual’s risk for dying, hospitalizations that can be avoided, and even receiving conflicting advice from physicians and other health care providers increases.
- People with MCC also are at greater risk of poor day-to-day functioning. MCC contributes to frailty and disability. Functional limitations often complicate access to health care, interfere with self-management, and necessitate reliance on caregivers.

**Chronic Conditions**

- 7 out of 10 deaths among Americans each year are from chronic diseases. Heart disease, cancer and stroke account for more than 50% of all deaths each year.1
- In 2005, 133 million Americans – almost 1 out of every 2 adults – had at least one chronic illness.2
- Obesity has become a major health concern. 1 in every 3 adults is obese3 and almost 1 in 5 youth between the ages of 6 and 19 is obese (BMI ≥ 95th percentile of the CDC growth chart).4
- About one-fourth of people with chronic conditions have one or more daily activity limitations.5
Arthritis is the most common cause of disability, with nearly 19 million Americans reporting activity limitations.  

Diabetes continues to be the leading cause of kidney failure, nontraumatic lower-extremity amputations, and blindness among adults, aged 20-74.  

Excessive alcohol consumption is the third leading preventable cause of death in the U.S., behind diet and physical activity and tobacco.

### Common Causes of Chronic Disease

- Four modifiable health risk behaviors—lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption—are responsible for much of the illness, suffering, and early death related to chronic diseases.

- More than one-third of all adults do not meet recommendations for aerobic physical activity based on the 2008 Physical Activity Guidelines for Americans, and 23% report no leisure-time physical activity at all in the preceding month.

- In 2007, less than 22% of high school students and only 24% of adults reported eating 5 or more servings of fruits and vegetables per day.

- More than 43 million American adults (approximately 1 in 5) smoke.

- In 2007, 20% of high school students in the United States were current cigarette smokers.

- Lung cancer is the leading cause of cancer death, and cigarette smoking causes almost all cases. Compared to nonsmokers, men who smoke are about 23 times more likely to develop lung cancer and women who smoke are about 13 times more likely. Smoking causes about 90% of lung cancer deaths in men and almost 80% in women. Smoking also causes cancer of the voicebox (larynx), mouth and throat, esophagus, bladder, kidney, pancreas, cervix, and stomach, and causes acute myeloid leukemia.

- Excessive alcohol consumption contributes to over 54 different diseases and injuries, including cancer of the mouth, throat, esophagus, liver, colon, and breast, liver diseases, and other cardiovascular, neurological, psychiatric, and gastrointestinal health problems.

- Binge drinking, the most dangerous pattern of drinking (defined as consuming more than 4 drinks on an occasion for women or 5 drinks for men) is reported by 17% of U.S. adults, averaging 8 drinks per binge.

(Source: citations for above bullets found at: [http://www.cdc.gov/chronicdisease/overview/index.htm#1](http://www.cdc.gov/chronicdisease/overview/index.htm#1))