

BETTER USE OF MEDICINES CAN IMPROVE HEALTH OUTCOMES AND REDUCE THE USE OF COSTLY MEDICAL CARE

Medicines play a central role in making our health care system more sustainable. Use of medicines can help patients avoid other costlier services, such as emergency room visits, hospital stays, surgeries and long-term care. Yet, despite the many health and economic benefits medicines provide, significant gaps in the appropriate use of medicines remain. This is particularly true for patients with chronic disease. Moving forward, medicines will continue to provide the best opportunity to improve health and drive value and quality in health care.

THE ECONOMIC BURDEN OF CHRONIC DISEASE IS SUBSTANTIAL

Medicines enable us to more effectively treat the leading driver of health care costs: chronic disease. Six in ten Americans have one or more chronic conditions. The cost of treating these patients accounts for 90% of the nearly \$3.5 trillion spent on health care in the United States each year.^{1,2} Sixty percent of American adults have at least one chronic condition and 42% have two or more. Patients with multiple chronic conditions are a significant driver of health care costs. In fact, the 12% of people with five or more chronic conditions account for 41% of total health care spending and spend 14 times more on health services than people without chronic conditions.³ The number of individuals with three or more chronic conditions is projected to nearly double by 2030, greatly increasing the economic burden of chronic disease.⁴

SIGNIFICANT GAPS IN OPTIMAL USE OF MEDICINES

Nearly 75% of American adults do not follow their physicians' prescription orders, including not filling their prescriptions or taking less than the recommended dose. Just 50% of medications for chronic disease are taken as prescribed.^{5,6} More than one quarter of newly written prescriptions are never brought to the pharmacy to be filled, including those for common conditions such as high blood pressure, diabetes and high cholesterol.⁷ Additionally, failing to prescribe appropriate treatments when indicated is the most common prescribing quality problem.^{8,9} For example, more than one-third of patients newly diagnosed with heart failure do not receive recommended medicines as indicated within a month following diagnosis.¹⁰

Limited access to, or restrictive coverage of, medicines may also contribute to gaps in optimal medicine use. The growing use of high deductibles and coinsurance for medicines presents affordability challenges for many patients. Individuals may also face other hurdles to filling prescriptions, such as "fail first" and prior authorization requirements.^{11,12} Patients with chronic conditions are disproportionately affected by declining generosity of coverage. Such access restrictions to medicines can lead to patients not adhering to prescribed treatment regimens, resulting in poor outcomes.^{13,14,15,16,17}

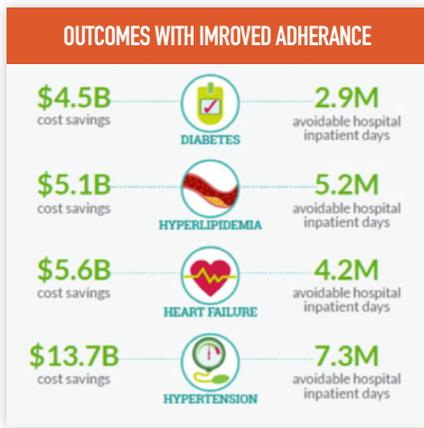
BETTER USE OF MEDICINES CAN IMPROVE HEALTH OUTCOMES AND REDUCE HEALTH CARE SPENDING

Fortunately, where there are gaps there are also tremendous opportunities to drive value in our health care system. In fact, better use of medicines could eliminate \$213 billion in U.S. health care costs annually, amounting to 8% of the nation's health care costs.¹⁸

A large body of evidence demonstrates how better use of medicines can lead to reductions in other sources of health care spending across a broad range of chronic conditions (See Figure 2). For example, spending \$1 more on medicines for adherent patients with congestive heart failure, high blood pressure, diabetes or high cholesterol can generate \$3 to \$10 in savings on emergency room visits and inpatient hospitalizations.¹⁹

Savings due to improved use of medicines are also well documented in public programs. In fact, the Congressional Budget Office credits Medicare policies that increase use of medicines with savings on other Medicare costs.²⁰ As a result of seniors gaining Medicare Part D prescription drug coverage, Medicare saved \$27 billion alone due to improved adherence to congestive heart failure medications.²¹ Improving medication adherence among Medicare beneficiaries with various common chronic diseases could save billions in avoided hospital stays.²²

Similarly in Medicaid, research shows increased use of medicines among patients is associated with reductions in expenditures from avoided use of inpatient and outpatient services.²³ For example, among Medicaid patients with congestive heart failure, hypertension, high cholesterol, diabetes, asthma/chronic obstructive pulmonary disease, depression and schizophrenia/bipolar disorder, improving adherence could produce \$8 billion in savings annually.²⁴ Another study found if 60% of the children enrolled in Medicaid achieved high adherence to asthma treatment in just 14 states, Medicaid could achieve \$57.5 million in savings.²⁵



Patients with complex diseases may also reduce their health care spending by exercising better adherence. For example, Medicare patients with Parkinson's disease, adults with Crohn's disease, children with cystic fibrosis and patients with multiple sclerosis and advanced melanoma have all been shown to achieve health care savings through improved use of medicines.^{26, 27, 28, 29, 30}

In addition to savings from avoided medical services, better use of medicines also improves health and overall quality of life, which can lead to reduced disability and fewer missed days of work. One study found the introduction of new treatments over the past decade increased worker productivity by 4.8 million work days per year and resulted in \$221 billion in added annual wages.³¹

Lowering cost sharing at the pharmacy counter is one opportunity to also improve health outcomes and generate savings through improved adherence. For example, passing through a portion of negotiated manufacturer rebates directly to Medicare

beneficiaries taking diabetes medicine could lower patient out-of-pocket spending by \$367 per year, thereby improving adherence and preventing disease complications. As a result, this would save Medicare nearly \$1000 per senior per year and reduce total health care spending by approximately \$20 billion over 10 years.³² Similarly in commercial health plans, if manufacturer rebates are shared with diabetes patients at the pharmacy counter individuals could save a total of \$3.7 billion per year, or \$791 per person per year, and health plans could save \$305 million annually due to reductions in medical spending.³³

In times like these, as hospitals are overwhelmed with patients and medical professionals are struggling to fight coronavirus and its consequences, the role that medicines play in keeping patients healthy and reducing the need for costly medical care and hospitalizations could not be more apparent. Today and in the future, medicines will play a central role in making our health care more sustainable. For example, if we do nothing to address the costs of Alzheimer's disease, we will be spending \$1.1 trillion on this condition alone by 2050. But if we develop one new medicine to delay the onset of the disease by just five years, we could save the health care system \$367 billion by 2050.³⁴ In consideration of the current public health crisis and the many diseases where there is significant unmet need, the development of medicines will remain a critical tool in addressing the most costly and challenging diseases of our time.

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