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. The COVID-19 pandemic illustrates how critical medicines are in overcoming our most pressing health care challenges. At the start of the pandemic, our hospital systems were overwhelmed, resources stretched, and death rates were growing at an alarming rate. Today, vaccines protect against the virus and therapeutics reduce its consequences. Importantly, we also have the means to minimize the extraordinary burden that formerly threatened to overwhelm our health care system. In fact, since the introduction of novel COVID-19 vaccines, the U.S. vaccination program is estimated to have saved 2 million lives and averted up to 17 million hospitalizations.[1]

This transformation is possible because medicines not only improve and save lives, but they help avoid other, often costly, health care 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 use of medicines exist, and there are many diseases for which new medicines are desperately needed. Importantly, given the disproportionate impact that many diseases have on communities of color and underserved populations, any strategy to reduce gaps in appropriate use of medicines must include efforts to lessen the health disparities experienced by these populations.[2] Moving forward, medicines will continue to provide the best opportunity to address critical unmet need, improve health and drive value and quality in our health care system, for all Americans.

The Economic Burden of Disease is Substantial

Six in ten Americans have one or more chronic conditions, and 42% have two or more.[3] The cost of treating these patients accounts for 90% of the nearly $4 trillion spent on health care in the United States each year.[4,5] 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.[6] And while rare diseases by definition impact fewer than 200,000 patients, collectively, these diseases impose a significant economic burden. One study found nearly 400 rare diseases impacted 15.5 million Americans and cost the U.S. $966 billion annually.[7]

Significant Gaps in Optimal Use of Medicines

Just half of medications for chronic disease are taken as prescribed.[8] 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.[9] Additionally, failing to prescribe appropriate treatments is the most common prescribing quality problem.[10] 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.[11] And despite the many novel diabetes medicines becoming available to patients over the past decade, the number of diabetes patients with their disease under control has declined and use of diabetes medicines has failed to keep pace with the growing number of high-risk patients with the disease since 2010.[12]

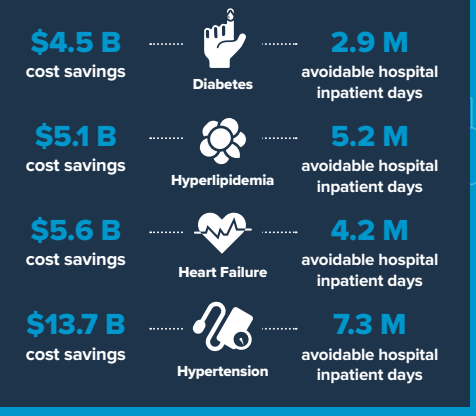
Gaps in optimal use of medicines worsen outcomes for patients. Fewer than 1 in 5 U.S. adults with diabetes are meeting the recommended clinical goals with their current treatment regimen.[13] For example, among patients with poorly controlled diabetes, Mexican Americans and Black Americans are less likely to receive optimal treatment compared to non-Hispanic white Americans.[14] The disparity in medicine use and disease management may help to explain why racially and ethnically diverse communities are disproportionately more likely to experience diabetes-related complications and death.[15]

Limited access to or restrictive coverage of medicines may also contribute to gaps in optimal medication use. The growing use of high deductibles and coinsurance for medicines presents access and affordability challenges for many patients. Individuals may also face other hurdles to filling prescriptions, such as prior authorization restrictions or step therapy requirements which require patients to try and fail other available therapies before being able to access prescribed treatments.[16,17] Patients with chronic conditions are disproportionately affected by eroding health care coverage, often leading patients to not adhere to prescribed treatment regimens or to abandon them altogether, resulting in poor outcomes.[18,19,20,21]

Better Use of Medicines Can Improve Health Outcomes and Reduce Health Care Spending

Fortunately, there are also tremendous opportunities for medicines 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.[22] A large body of evidence demonstrates how better use of medicines can reduce other sources of health care spending across a broad range of chronic conditions. 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.[23]

Outcomes With Improved Adherence



Savings due to improved use of medicines are also well documented in public programs. The Congressional Budget Office credits Medicare policies that increase the use of medicines with savings on other Medicare costs.[24] As a result of seniors and people with disabilities gaining Medicare Part D prescription drug coverage, Medicare saved $27 billion alone due to improved adherence to congestive heart failure medications.[25] Improving medication adherence among Medicare beneficiaries with various common chronic diseases could save billions in avoided hospital stays.[26] 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.[27] 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.[28] 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.[29]

Patients with complex chronic 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.[30, 31, 32, 33, 34]

In addition to savings from avoided medical services, better use of medicines also improves health and overall quality of life, leading 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 workdays per year and resulted in $221 billion in added annual wages.[35]

Lowering patients' costs at the pharmacy counter can also improve health outcomes and generate savings through improved adherence.[36] 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 ten years.[37] Similarly, in commercial health plans, if manufacturer rebates are shared with diabetes patients at the pharmacy counter, individuals could save a total of $1.5 billion over ten years, or on average $500 per person per year. Furthermore, Black and Hispanic Americans are estimated to see the largest reductions in combined medical and medicine health care costs- saving 6% and 9% of combined health care costs, respectively.[38]

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