Improving Patient Medication Adherence: A $100+ Billion Opportunity

Opportunity

Poor patient medication adherence: $100+ billion in wasteful health care spending

Approximately 187 million Americans take one or more prescription drugs. Up to one-half of patients in the United States do not take their medications as prescribed. Such poor medication adherence exacts a heavy toll of unnecessary illness, hospitalizations, disability, and premature death, particularly among patients with chronic disease. Among hypertension patients alone, an estimated 89,000 premature deaths per year could be avoided with appropriate medication treatment.

The Costs and Consequences of Poor Medication Adherence

- Not taking medications as prescribed costs more than $100 billion each year in excess hospitalizations.
- Diabetes patients with poor medication adherence have a 30 percent yearly risk of hospitalization, as opposed to a 13 percent risk for those who accurately follow prescriber guidelines.
- Up to 54 percent of children suffering from asthma do not take medications as prescribed, which has been correlated with functional impairment, emergency department visits, and school absences.
- Total annual healthcare spending for a diabetes patient with a low level of medication adherence ($16,499) is almost twice as much as for a diabetes patient with a high level ($8,886).

Solutions

Improving medication adherence is a cost-effective approach to improving health outcomes and lowering health care costs. For example, diabetes and heart disease patients who are medication adherent are 48 percent less likely to die prematurely. In addition, asthma patients who are medication adherent are 11 percent less likely to have an emergency room visit or hospitalization. A number of interventions encourage continuity of care, better understanding of drug regimens, and active involvement of patients in their treatment plans.

Patient Care Improvements

Care Coordination

- Case Management: Diabetes patients receiving biweekly automated calls and self-care training by nurses are 21 percent more adherent to their medications than those who receive usual care.

Patient Engagement and Education

- Discharge Counseling: Elderly patients who receive pharmacist counseling before hospital discharge improve their medication adherence by 43 percent.
- Motivational Interviewing: Patients who participate in discussions about their individual needs, constraints, and preferences are 13 percent more likely to take their medications as prescribed compared to patients receiving usual care.

Drivers for Change

- Screening and Assessment
- Team-Based Care
- HIT Infrastructure
- Financial Incentives
- Quality Measurement

Improving medication adherence requires an integrated set of solutions, including improvements in patient engagement, provider interactions, data sharing, and payment systems. These strategies apply to policymakers, providers, payers, and patients alike.

Action Steps

Screening and Assessment

- Expand use of proven screening and assessment tools to target patients at greatest risk for nonadherence, such as those with depression.
- Create tools for providers to promote medication review and reconciliation and patient engagement, such as the American Society of Health-System Pharmacists Medication Reconciliation Toolkit.

Team-Based Care

- Promote use of care teams composed of physicians, pharmacists, nurses, and other health care professionals to monitor adherence and counsel patients.

HIT Infrastructure

- Invest in electronic health records, ePrescribing, and clinical decision support systems and ensure that HIT investments support collection and sharing of data relating to proper use of medications.
- Encourage sharing of near real-time prescription fill and refill data among providers, between patients and providers, and between providers and pharmacists to implement instantaneous point-of-care medication review and regimen reconciliation.
Nonadherent diabetes and heart disease patients have significantly higher mortality rates (12.1 percent) than similar patients who were adherent (6.7 percent).10

What Are the Root Causes?11

- High out-of-pocket costs for patients, especially those taking multiple prescriptions for chronic conditions.
- Lack of care coordination, follow-up, and shared decisionmaking among and between physicians, patients, pharmacists, nurses, caregivers, and other healthcare providers.
- Materials and communication that are not culturally, linguistically, or patient sensitive.
- Complex or burdensome treatment regimens or large numbers of prescribed medications.
- Comorbidities, such as severe and persistent mental illness.
- Side effects of prescribed medications, whether real or perceived.
- Personal factors including lifestyle, culture, and belief system.

Patient Education and Follow-up: Patients with depression who are provided educational materials and one-on-one follow-up are twice as likely to refill their prescriptions.19

Counseling and Medication Management:

- Fifty-six percent of HIV/AIDS patients enrolled in a Medication Therapy Management (MTM) program, which includes a multi-disciplinary team approach to care, follow their medication directions compared to 38 percent of HIV/AIDS patients who did not receive MTM.20
- Patients with high blood pressure taking once-daily therapies are 11 percent more adherent than those taking twice-daily therapies.21

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Notes

5. Osterberg and Blaschke T.
11. Osterberg L, Blaschke T.
12. Osterberg and Blaschke T.
25. American College of Cardiology, GlaxoSmithKline, the National Association of Chain Drug Stores (NACDS) Foundation, the National Consumers League (NCL), and the Pharmaceutical Research and Manufacturers of America (PhRMA).
26. Ibid.
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