



## **Rx: Health Care FYI #25**

**Subject:** *Taking your Medicine Can Reduce Health Care Costs*  
**From:** *Rep. Tim Murphy (PA-18)*

**The problem:** Failure to take prescription medications properly accounts for approximately 125,000 deaths<sup>1</sup> and an additional \$100 billion per year in preventable hospitalizations, emergency department visits, and repeat physician visits.<sup>2</sup>

### **Patients are not taking prescribed medications properly:**

- 29% of Americans stop taking their medicine before it runs out; 22% take less medication than is prescribed on the label; <sup>3</sup> 37% of the uninsured don't fill their prescriptions at all.<sup>4</sup>

### **Reasons given by patients for not taking their prescribed medication:**

- 64% said they "forgot"; 36% had symptoms that went away; 35% wanted to save money; 33% did not believe the drugs were effective; 31% doubted the need to take them and 28% experienced unwanted side effects.<sup>5</sup>

### **Who is not taking medicines? Noncompliance is found in all ages and diagnostic groups:**

- A study of children prescribed 10-day courses of penicillin for streptococcal infections, showed that 56% stopped taking the drug by the third day, 71% by the sixth day and 82% by the ninth day. The recommended regimen is one pill three times a day for 10 days.<sup>6</sup>
- Even 20% percent of doctors and nurses regularly miss doses of prescribed medications.<sup>7</sup>
- 50% of cardiovascular patients forget to take their medications.<sup>8</sup>
- Five years after seniors were prescribed cholesterol-lowering statin drugs, only 26% were still taking them.<sup>9</sup>
- 22% of seniors in eight states skipped doses or failed to fill their prescriptions at some point during the year due to cost.<sup>10</sup>

### **Not taking prescribed medications increases health care costs and risks:**

- 10% of all hospital admissions are the result of patients failing to take prescription medications correctly at a cost of \$15 billion per year.<sup>11</sup>
- 23% of all nursing home admissions are due to patients failing to take prescription medications accurately.<sup>12</sup>
- The average length of a preventable stay in hospitals due to medication noncompliance is 4.2 days.<sup>3</sup>
- People who miss doses need 3 times as many doctor visits as others and face an average of \$2,000 more in medical costs per year.<sup>13</sup>

<sup>1</sup> Medication Digest. *Compliance-Adherence-Persistence*. American Pharmacists Association. 2003.

<sup>2</sup> Noncompliance with Medications: An Economic Tragedy with Important Implications for Health Care Reform. The Task Force for Compliance, April 1994.

<sup>3</sup> American Heart Association: The National Council on Patient Information and Education. 2005.

<sup>4</sup> Kaiser Family Foundation. Prescription Drug Trends Update. October 2004.

<sup>5</sup> The Wall Street Journal Online/Harris Interactive Health-Care Poll. Prescription Drug Compliance. 2005.

<sup>6</sup> Haley, Eugene. Reinventing the medicine wheel. Washington Times. 2003.

<sup>7</sup> Corda, RS, et al. Adherence to prescription medications among medical professionals. Southern Medical Journal. June 2000. 93(6): 585-589.

<sup>8</sup> Sud and Eagle. University of Michigan Cardiovascular Center. Drugs for Acute Coronary Syndromes. March 2004.

<sup>9</sup> Benner. Joshua. Long-term Persistence in Use of Statin Therapy in Elderly Patients. July 24, 2002.

<sup>10</sup> Seniors and Prescription Drugs: An 8-State Survey. Kaiser Family Foundation. 2002.

<sup>11</sup> American Heart Association. Statistics you need to know. 2002.

<sup>12</sup> Standberg, L.R., Drugs as a Reason for Nursing Home Admissions, American Healthcare Association Journal, 10,20. 1984.

<sup>13</sup> Lifeclinic. Medication compliance aids. Available at: [http://www.lifeclinic.com/focus/blood/supply\\_aids.asp](http://www.lifeclinic.com/focus/blood/supply_aids.asp). August 2003.

- Missed doses of anti-glaucoma medications lead to optic nerve damage and blindness; Missed doses of cardiac medications leads to cardiac arrest; Missed doses of anti-hypertensives lead to rebound hypertension; Missed or discontinued doses of antibiotics lead to recurrent infection and also to the emergence of resistant micro-organisms.<sup>14</sup>
- If the physician is not aware of the noncompliance, higher doses or additional medications might be prescribed which are unnecessary, expensive and possibly dangerous.

#### **Taking medications lowers health care costs:**

- Patients who were prescribed four types of proven medications including aspirin, beta blocker, ACE inhibitor and statins for a heart attack had a 90 percent lower risk of dying in the six months after they left the hospital than those who received none of the drugs.<sup>15</sup>
- Patients who adhere to medication schedules with newer drugs results in an average \$111 annual savings in total health spending per medical condition. They also save from reduced hospital and in physician office-visit expenditures, in home health care, outpatient and emergency room visits.<sup>16</sup>
- Pharmacists working with physicians to monitor and maintain patients' drug therapies reduces drug-related illnesses by \$177 billion annually.<sup>17</sup>
- 35% of patients with chronic illnesses never discussed with their doctor that they planned to reduce their own medications due to costs. However, when patients talked with doctors about costs, 72% found these conversations helpful because clinicians offered free samples or advice on obtaining prescription payment assistance.<sup>18</sup>

#### **The Federal Government's Role:**

- The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (Public Law 108–173) will provide reimbursement to pharmacists for medication therapy management (MTM) programs. These programs manage and monitor patients' drug therapy for chronic conditions to ensure that seniors are taking medications to improve therapeutic benefits and reduce the risk of adverse drug reactions. **NOTE: When determining the cost of the Medicare bill, the Congressional Budget Office (CBO) did NOT score the potential cost savings that may well result from reduced hospitalizations, fewer medication errors, and increased patient compliance with drug regimens for these patients participating in medication therapy management programs.**

#### **Recommendations:**

- Implement Electronic Medical Records and Electronic Prescribing for doctors and pharmacists to ensure that patients are taking the right drug for the right condition at the right time.
- Improve public health patient education programs to increase medication compliance.
- Emphasize the benefits of prescription drug compliance and the availability of medication therapy management programs as well as the medical risks of noncompliance in public service announcements from HHS.
- Encourage patients be active consumers. If the cost of medicine is keeping patients from taking their pills, they should discuss alternatives with their doctors, eligibility for drug assistance programs, dosage levels or using less expensive generic brands.
- Medicare should monitor and report to Congress cost-savings from careful adherence to medication treatment through medication therapy management programs.

<sup>14</sup> John Urquhart, "Drug Delivery Technology and Patient Compliance for New Products," Paper presented at The Conference on Advanced Therapeutics: Overcoming End User Barriers. Co-sponsored by the National Pharmaceutical Council and Frost and Sullivan, Baltimore, April 17-18, 1989.

<sup>15</sup> Mukherjee, Deborah. Et. al. Impact of Combination Evidence-Based Medical Therapy on Mortality in Patients With Acute Coronary Syndromes. February 2004.

<sup>16</sup> Are The Benefits Of Newer Drugs Worth Their Cost? *Health Affairs*, September/October 2001; "Newer drugs cut overall healthcare costs: study," *Reuters Health*, September 6, 2001.

<sup>17</sup> Brian, Islet. Et. al. Quality Assessment of a Collaborative Approach for Decreasing Drug-Related Morbidity and Achieving Therapeutic Goals. *Arch Intern Med*. 2003;163:1813-1820.

<sup>18</sup> Cost Related Medication Underuse. Do Patients With Chronic Illnesses Tell Their Doctors? *Arch Intern Med*. 2004;164:1749-1755.