



Canada Life[™]
Reinsurance

Medicinal Compliance

strength ♦ stability ♦ solutions

Agenda

- Financial Impact
- Complexities of Adherence
- Impact of Social Networking
- Ways to Improve Compliance

Compliance/Adherence

Can be defined as:

- The degree to which a patient correctly follows medical advice

Financial Impact of Noncompliance

- Costs the U.S. between \$100 billion to \$289 billion a year
- Causes 125,000 deaths a year
- Results in up to 10% of all hospitalizations
- Accounts for 33% to 69% of drug-related adverse events that result in hospital admissions
- Is associated with up to 40% of nursing home admissions



Adherence Rates

- In the U.S. 3.8 billion prescriptions are written every year – over 50% are taken incorrectly or not at all
- Study of 75,000 commercially insured patients – 30% failed to fill a new prescription and new prescriptions for chronic conditions were not filled 20-22% of the time

- Source: Fischer MA, Stedman MR, Lii J, et al. Primary medication non-adherence; analysis of 195,930 electronic prescriptions. J Gen Intern Med. 2010;25:284-290. Abstract

Adherence Rates

- Adherence rates drop after the first 6 months
- Only 51% of Americans treated for hypertension are adherent to their long term therapy
- 25 to 50% discontinue statins within 1 year of treatment initiation, 2 year nonadherence rate is as high as 75%

■ Source: Medication Adherence: Who Cares? Marie T. Brown, MD and Jennifer K. Bussell, MD

Noncompliance

Results in

- Hospitalization
- Rehospitalization
- Premature death



Indirect Cost of Non-compliance

- Loss of productivity
- Impact on quality of life

Compliance rate in older populations averages <45%

- Why?
 - They alter their medications
 - Polypharmacy/complex drug regimens
 - They mix up their medications
 - Adverse side effects such as dizziness and confusion from combining meds

Factors That Contribute to Poor Compliance

- Lack of understanding of their disease
- Lack of understanding of adverse affects
- Lack of involvement in the treatment decision-making process
- Poor mental health (depressed patients are 3x more likely to be noncompliant)
- Communication barriers

Factors (cont'd)

- Lack of health information technology
- Lack of transportation/access to care
- High medication costs
- Long wait times at the pharmacy
- Lack of family or social support

Factors (cont'd)

- Duration of therapy
- Drugs being prescribed by multiple health care providers
- Visit time limitations
- Medications with social stigma
- Ethnic backgrounds
- Patient's age, mental status and memory capabilities

Other Reasons for Noncompliance

- Change in pill color (34% increase)
- Color of medicine associated with effectiveness
- Change in pill shape (66% increase)



Social Networking

- Discuss medications, dosages and adverse effects
- Give/receive advice
- One study – 55% of patients rely entirely on their physician to make treatment decisions; 45% go elsewhere
- Another study 68% of patients turned to other sources to validate info received from their MD

How do we improve compliance?

- Simplify packaging
- Provide instructions clearly in writing and verbally
- Provide reminders to take medications
- Improve patient education
- Limit number of medications taken at one time
- Decrease number of daily doses – 1x daily = 80% compliance, 4x daily = 40% compliance

Improve compliance (cont'd)

- Match regimen to patient's activities of daily living
- Method of administration – oral has better compliance than injection for example
- Involve the patient with their therapy plan
- Make accessibility to the healthcare system convenient
- Healthcare personnel should be aware of any financial constraints

In Summary

- “Drugs don’t work in patients who don’t take them.”
- C. Everett Koop, MD