

FROM THE FAMILY PRACTICE INQUIRIES NETWORK

# How can I improve patient adherence to prescribed medication?

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## ■ EVIDENCE-BASED ANSWER

Two randomized clinical trials have shown that simplified dosing schedules have improved patient adherence to medication as prescribed. Some, but not all, randomized controlled trials show multidimensional interventions can also improve adherence. These interventions include combinations of patient and family education, home monitoring of disease status, and increased convenience of care, such as workplace access. (Grade of Recommendation: B, based on randomized controlled trials\*)

## ■ RECOMMENDATIONS FROM OTHERS

Three primary care textbooks recommend providing patients with simple written instructions to enhance compliance with medications.<sup>1-3</sup> Another text<sup>4</sup> also advocates simple written instructions and recommends follow-up reminders, addressing compliance issues at patient visits, and maintaining compliance interventions throughout the duration of treatment.

## ■ EVIDENCE SUMMARY

Medication adherence is defined as the extent to which patients follow instructions for prescribed treatments.<sup>5</sup> Estimates of medication adherence range from 0% to 100% and are typically approximately 50%.<sup>5</sup> The Cochrane Database of Systematic Reviews evaluated the published, unbiased, randomized controlled trials of interventions to improve medication adherence that measured both adherence and treatment outcome. Eighty percent follow-up was required, as well as a 6-month follow-up period for long-term treatments with initial positive outcomes. A total of 4762 citations were evaluated; only 19 met their criteria for full consideration. We did not find any more recent or additional trials that met the Cochrane criteria for consideration.

The interventions studied included combinations of patient and family counseling (verbal, written, telephone, and automated); patient involvement in self-monitoring of outcomes (eg, blood pressure); simplified medication regimens; reminders of appointments, refills, and pill schedules; and care provided at the workplace. All interventions were for single clinical conditions including hypertension (7 studies), schizophrenia and psychosis (6), asthma (2), acute infection (2), hyperlipidemia (1), and epilepsy (1). Both of the studies concerning simplifying medication regimens showed a positive effect on medication adherence. Nine of 16 studies on varying strategies of interventions reported statistically significant increases in medication adherence. Most of the studies that used multidimensional interventions did not assess the individual components of the

interventions; therefore, it is impossible to determine if one part of a complex intervention was more important than another. Also, only small improvements in adherence or treatment outcomes were observed in these studies.

This review was designed to specifically address interventions to improve patient compliance with prescribed medication. Other areas of potential significance to patient compliance are health care access, continuity of care, and medication side effects. In addition to simplifying dosing regimens, it would stand to reason that maximizing the provision of care and minimizing adverse medication side effects would have a positive effect on patient compliance.

#### **CLINICAL COMMENTARY**

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The strategies mentioned in the review are the ones we all learned in medical school and that we should be using in our daily practice. But physicians are not any better doing what we should than our patients are at taking their medications. The principal challenge we face as physicians in improving adherence is not in knowing what to do but doing it consistently. We are not likely to succeed at this until we have practice tools to support such consistency, such as computerized prompt and reminder systems and a reimbursement structure that supports some of more innovative approaches mentioned in the review.

#### **R E F E R E N C E S**

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