Patient medication noncompliance in the U.S. is uncomfortably high as far as healthcare providers are concerned. What are some of the reasons for noncompliance? What can a physician do to improve health outcomes? This white paper addresses these issues and reveals a strategy to improve medication adherence and compliance that is easy for both patients and healthcare professionals.

We all know that improving medication adherence and compliance is a significant challenge to today’s healthcare system. But have you really taken in just how staggering the numbers can be? Studies show that patient medication noncompliance in the U.S. contributes to approximately 125,000 deaths each year. Nonadherence compromises an individual’s health and requires more aggressive treatment later, taking a major toll from the single patient perspective. The costs to our healthcare system are equally as startling. An additional $290 billion is spent each year simply because patients aren’t doing what you ask them to do.

**WHY DON’T PATIENTS ADHERE AND/OR COMPLY?**

**Forgetfulness**

- The most common reason.
- 1 in 3 patients never claim their prescribed medication from the pharmacy.
- Of those who do pick up their prescriptions, nearly 3 out of 4 do not take the medication as prescribed.

**Complexity**

- Patients struggle with complicated regimens.
- 50% of U.S. adults take at least 1 prescription medication.
- 60% of U.S. adults aged 65 or older take 5 or more medications.
- 9 out of 10 outpatients take prescribed medicines incorrectly.
- 50% of the 2 billion prescriptions filled each year are taken incorrectly.
- Noncompliance among patients with chronic conditions is 50 to 60%.
Self-Diagnosing
30% report not taking medicines as prescribed because:

• They didn’t think they needed the medicine.
• They didn’t think the medicine was helping them.
• Their symptoms went away.
• They felt sick from taking the medicine.

Lack of Engagement
• On average, doctors spend 49 seconds during a visit telling the patient about a new medication.
• In more than 80% of hospitalizations, there is no direct communication between the hospital and the primary care physician.

FROM PATIENT NONCOMPLIANCE TO IMPROVED HEALTH OUTCOMES
According to a study developed and funded by Medscape, simple interventions that are workable in daily practice and that are easy for both the healthcare professional and the patient appear to be most promising in improving patients' management of medications. Study researchers noted that electronic reminders were statistically significant in helping patients comply with their medication regimens. Right now, the most effective medication management programs are complex and consist of multiple activities. Automated phone, text and email messages are experiencing increased adoption as a way to effectively execute these frequent communications.

Several studies across various ailments show the effectiveness of automated notifications in medication adherence. A Kaiser Permanente study showed that patients who received automated reminders for cholesterol-lowering statins were 1.6 times more likely to fill their prescriptions than those who didn’t. Adherence levels increased from 26% to 42% overall.

93% of adolescents who received a text message about asthma medication adherence reported that the automated text reminder helped them better take care of their asthma. The study further showed that text messages contributed to the adolescents' significantly higher adherence and confidence in managing their asthma.

Approximately 40% of glaucoma patients struggle to use their eye drops on a regular basis. A Johns Hopkins clinical trial showed a 16% increase in compliance by glaucoma patients due to automated dosing reminders for their prescribed eye drops.

AN AUTOMATED STRATEGY
Easy for the healthcare professional
The top automated notification systems will allow a practice to send phone calls, emails and text messages to specific patients at designated times and require no micromanaging from providers and staff. Hundreds of messages can be sent within minutes. Practices
can even set the number of notifications being delivered at any given time, ensuring they will be properly staffed for any incoming questions from patients about their medication.

**Easy for the patient**

Reach out to patients where they are and increase your likelihood of connection using various types of notifications – phone calls, text messages and/or emails. The immediacy of a phone call lends itself to instant response, such as a call transfer to staff from a patient with questions. Two-way SMS, not available from all notification systems, is also effective in providing immediate feedback to the physician. Text usage is growing 80% annually per subscriber. And it's growing among all age groups. An effective supplement to phone and text is email. Email simply isn't going away, and with many people having ready-access to their email via smartphones, they are checking email more frequently.

**Improve patients’ adherence to medications**

On average, doctors spend 49 seconds during a visit telling the patient about a new medication. And with providers increasingly pressed for time, that 49 second window may get smaller. Automated messaging allows for quick follow-up with patients after the visit, expanding on instructions given and reminding them to fill or pick up their prescription.

Patient forgetfulness is an ailment easily treated with consistent reminders. Notifications can be sent as often as the provider feels necessary to help patients not only remember to take their medications but also remind them to follow prescribed instructions. 42% of people feel they could better follow treatment plans, including medications, with encouragement from their provider between visits. Automated notifications can assist patients with complex treatment schedules without taking time from an already resource-strapped staff. They make delivering personalized information, support and reminders as easy as writing a prescription. Patients can also be reminded that discontinuation of medication due to illness improvement should only be prescribed by their provider.

**AUTOMATION AND THE PRESCRIPTION PROCESS**

Improved medication adherence and compliance means fewer emergency room visits, reduced employer healthcare expenses, decreased hospital visits and stays, controlled costs and reduced death rates. Frequent, clear and consistent communication to patients from providers about their medication-taking behaviors is another step on the path to improved health outcomes. Automated notifications can provide or supplement outreach strategies for this purpose. However you deliver it, all signs point to increased patient outreach and engagement to combat the rising cost of medication nonadherence and noncompliance.
Doctor Visit: Medication Prescribed

Remind patients to fill and pick up their prescription

Good evening, this is a message from Jones Family Practice for Jim Smith. As a follow-up to your visit today, we wanted to remind you to fill your prescription(s) as prescribed by Dr. Jones. Filling your prescription is important in improving current health and maintaining ongoing wellness.

Remind patients to TAKE their medications as prescribed, including specific instructions and more information on accessing support

Good evening, this is a message from Jones Family Practice for Jim Smith. As a courtesy, we wanted to check in to be sure you are properly taking the medication prescribed by Dr. Jones at 2 doses twice a day. If you are unsure about the medication instructions or have any questions about your medication, please contact the office at 545-676-8989 during regular office hours and ask to speak with a nurse.

Remind patients to REFILL their prescription(s) as scheduled to maintain adequate supply

Jones FP: Records show your meds are due for refill. U must refill promptly as part of your treatment plan. Any?s - txt YES and we’ll give u a call.

Remind patients of their follow-up appt or to schedule a repeat appointment to be sure compliance is on-going.

Sample follow-up appointment email

3 Short Message Service (SMS) For Asthma Management: A Pilot Study Utilizing Text Messaging To Promote Asthma Self-management, http://www.abstractsonline.com/Plan/ViewAbstract.aspx?sKey=58ef1f34b-76d6-4ebf-98df-1cde75a2121&cKey=c9e53efd-8af3-4bd8-941b-c22d9c9d9b&eKey=%7B7DE002A7-2790-4327-9891-FE8A2875920%7D
5 How Much Time Does It Take to Prescribe a New Medication? http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2582184/6