



**VITAL** INTERACTION

# HOW TO EFFECTIVELY USE AN APPOINTMENT CONFIRMATION SYSTEM TO REDUCE YOUR NO-SHOW RATE

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## INTRODUCTION

Maintaining physician productivity, financial stability and practice efficiency are ongoing concerns among medical practice administrators. Patient no-shows can be one of the main sources of uncertainty for a medical practice.

Practice productivity can be improved significantly by proactively addressing that uncertainty. This can be done in two ways:

- **By optimizing the schedule**
- **By developing and implementing no-show reduction strategies to keep patients from forgetting their appointments**

Optimizing the schedule alone won't address the uncertainty that's caused by patient no-shows, so it's important to develop a reminder workflow and follow-up process that will help patients keep their appointments and reduce your no-show rate. Using an automated appointment communication and confirmation system can be a cost-effective and efficient way to greatly reduce patient no-show rates—which, in turn, improves physician productivity, financial stability and practice efficiency. In order to derive the greatest benefit from any automated communication and confirmation system, several important steps should be followed, which will be discussed in this white paper.

## NO-SHOW RATES

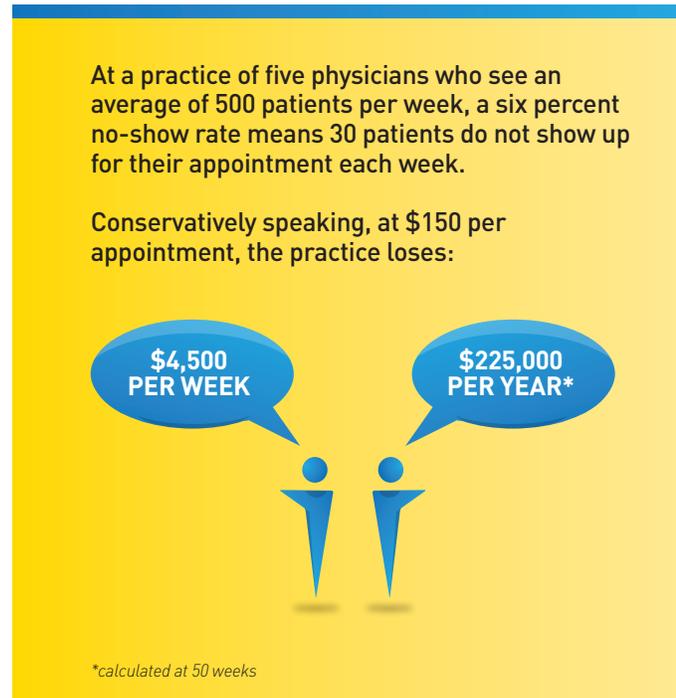
Data collected from studies show that medical practice no-show rates range from 2 to 30 percent. According to the Medical Group Management Association (MGMA), the national no-show rate in 2000 was 5.5 percent. According to Elizabeth Woodcock, most practices experience an average of 5 to 7 percent.<sup>1</sup>

This rate can vary significantly especially by geographic area, communities, medical specialty or payers. Woodcock reports no-show rates vary by specialties, often because they aren't the physicians that patients see regularly or aren't covered by their insurance. No show rates can vary by payers with higher no-show rates among self-payers or the Medicaid population.

### Why track and address patient no-shows?

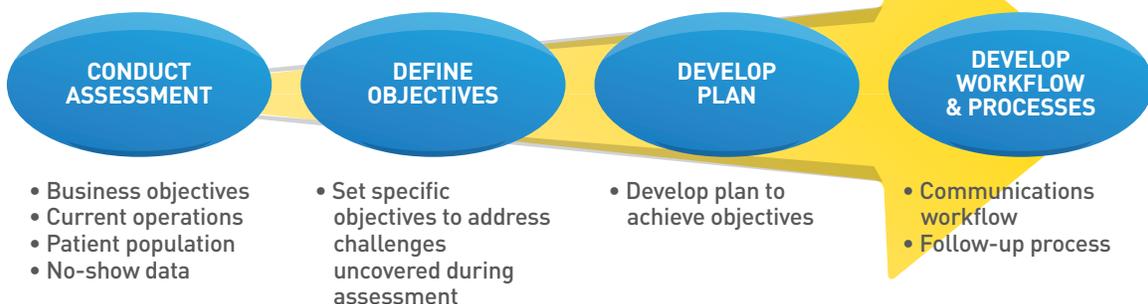
Patient no-shows may constitute the main source of uncertainty for a medical practice. Patient no-shows affect physician productivity, financial stability and practice efficiency. In addition, physicians increasingly face liability issues if the practice doesn't have an appropriate strategy to follow up with patients who miss appointments.

Patient no-shows also have a direct impact on patients by interfering with adequate medical care or continuity of care and is associated with adverse patient health outcomes. No-shows may also affect the health of other patients who may need appointments, but can't get one in a timely way.



## EFFECTIVELY USING AN AUTOMATED APPOINTMENT REMINDER/ CONFIRMATION SYSTEM TO REDUCE THE NO-SHOW RATE

In order to use any automated appointment reminder/confirmation system effectively, medical practices should consider several important steps in order achieve the greatest no-show rate reductions.



In order to illustrate the principles presented in this white paper, we have created some example medical practices that we'll follow through each of the steps.

**FIGURE 1: EXAMPLE MEDICAL PRACTICE PROFILES**

	<b>ABC Health Center</b>	<b>XYZ Physicians Group</b>
<b>Description</b>	Family practice with one location and ten physicians	Mid-sized dermatology practice with five locations and 30 physicians.
<b>Operational Realities</b>	<p>This health center located in a dense urban setting with a low-income population and more than 75 percent of their patients are covered by Medicaid and Medicare</p> <p>Has no automated reminder/confirmation system.</p> <p>Patient contact information:</p> <ul style="list-style-type: none"> <li>• Has phone numbers on file, but don't know if they are home or mobile phones</li> <li>• Does not have email addresses on file</li> </ul> <p>The schedule is typically full and well-visit appointments have to be made more than three-months in advance</p> <p>There is a short waitlist but not enough staff resources to fill canceled appointments without at least 24 hours' notice.</p> <p>Has sick visit traffic that can help offset some no-shows.</p>	<p>Has an automated voice messaging reminder system</p> <p>Patient contact information:</p> <ul style="list-style-type: none"> <li>• Has both home and mobile phone numbers on file</li> <li>• Has email addresses for about 15 percent of their patients</li> </ul> <p>Has staff resources to reschedule patients immediately and fill in an open appointment slot with 48-hours' notice.</p> <p>Each of their five locations has one or two very popular dermatologists and there is a three-week wait to get an appointment with one of these doctors.</p> <p>Each of these doctors has existing wait list and patients who don't mind being contacted on short notice.</p>
<b>No-show Patterns and Demographics</b>	Highest no-show rates are for well-visit appointments and is at 25 percent	Overall no-show rate of four percent.

### Assess operations and collect data

If you haven't already, you'll want to analyze your operations and collect data over a period of time, to identify where the challenges are and understand how patient no-shows are affecting your medical practice—your staff resources, physician productivity and revenue. You will also want to collect data on your patients who are not showing up for their appointments to determine if there are any patterns.

**FIGURE 2: EXAMPLES OF QUESTIONS TO CONSIDER**

<b>Operations</b>	<b>No-show Data</b>
<ul style="list-style-type: none"><li>• How many appointments per day is the physician completing?</li><li>• Does the loss of revenue from patient no-shows have an impact on the bottom line?</li><li>• How much time does your staff have to work with patients to remember or reschedule their appointment? Is their time better spent on other activities?</li><li>• Given the staff resources I have, how much time will it take for my medical practice to fill a canceled appointment?</li><li>• Is the physician in such demand that it will be easy to fill that appointment slot from an existing waiting list?</li><li>• Do I have an existing waiting list or list of patients who can be contacted and confirmed with short notice?</li><li>• Do patients have to be rescheduled because they forgot to comply with pre-appointment activities (like fasting prior to certain appointment types)?</li><li>• How much time elapses between scheduling and the actual appointment date? Does that span of time affect no-shows?</li><li>• Do you have up-to-date contact information for your patients? How is this information stored?</li></ul>	<ul style="list-style-type: none"><li>• Are there are days of the week and times of the day when most no-shows occur?</li><li>• Is there a certain visit type that has a higher no-show rate than another?</li><li>• Is there a particular patient demographic or patient population who is more likely to not show up?</li><li>• Are patient no-shows higher or lower at certain locations? Is the patient demographic at these locations significantly different?</li></ul>

Patterns and trends in patient no-shows can reveal solutions. For example, if there are days of the week and times of the day when most no-shows occur, these can be proactively addressed in appointment scheduling. Tracking patient no-shows will provide important data for the practice to proactively address, including identifying those who are more likely to forget and not show up for their appointment.

According to Carol Crews, a healthcare consultant, the following information should be tracked<sup>2</sup>:

- Reason given for not keeping the appointment
- Number of no-shows by provider
- Day of week and time of day most no-shows occur
- Visit type

Once you have the data you need you can decide what issues need to be tackled and define your objectives.

<sup>2</sup> Carol Crews, Reducing the No-show Rate in Your Practice. (1 December 2014). [http://www.hcplive.com/journals/MD\\_Magazine/2014/vol6-issue6/Reducing-the-No-Show-Rate-in-Your-Practice](http://www.hcplive.com/journals/MD_Magazine/2014/vol6-issue6/Reducing-the-No-Show-Rate-in-Your-Practice), accessed 15 March 2015.

In our example medical practices, this is what each discovered during a three-month assessment period:

**FIGURE 3: OPERATIONAL ANALYSIS AND NO-SHOW PATTERNS**

**ABC Health Center**

Serving a lower-income population, their reimbursement rates are lower, so patient volume is crucial to their operations.

Seventy-five percent of their patient population is covered by Medicaid and Medicare.

They qualify to receive monthly reimbursements of around \$40 per patient if they spend 20 minutes per month providing chronic care management services (CPT billing code 99490) to these patients.

No-show rate is highest among well-visit appointments. Reasons for this high no-show rate:

- Appointments are scheduled so far ahead of time, patients tend to forget
- Not for urgent health care needs, so patients don't prioritize these appointments

**Financial impact:**

- Out of 100 well-visit patients per day, up to 25 may not show
- At \$125 per well-visit appointment, potentially losing \$3,125 per day in appointment revenue

**Resource impact:**

Most of staff time has to be spent rescheduling patients, rearranging the day's appointments and physician schedule

**XYZ Physicians Group**

Because of the dermatologists' popularity, the no-show rate is very low, however up to three patients per day may forget to cancel until the day of their appointment, making it impossible to fill those slots.

**Financial impact:**

- At \$150 per non-procedural dermatology appointment, each location loses \$750 per day.
- In one week, each location loses \$3,750
- In one week, the five locations lose \$18,750

These appointments could have been filled easily and efficiently, if the staff had had 24 hours' notice.

The medical practice has an automated appointment reminder system that delivers reminder voice messages and does not have a feature that allows cancellations or confirmations. The practice sends out one message, four days in advance, in the evening, to the phone number they have on file.

**Define your objectives**

In most medical practices, the goal is to maintain a specific level of patient volume by reducing the main source of uncertainty in practice productivity—patient no-shows.

- One way to attain this goal is to develop strategies to optimize the schedule.
- The second way to achieve this goal is by proactively creating and implementing no-show reduction strategies.

In this white paper, we will focus on the latter and discuss setting specific objectives and creating communication workflows and processes, using an automated system, to help achieve those objectives.

The analysis of your operations and no-show data should have identified specific areas that need to be addressed. Examples of concerns you may have identified:

- Staff are having to spend most of their time on reminder, confirmation and rescheduling activities and not enough time on revenue-generating activities
- No-shows are significantly impacting physician productivity, staff efficiency or the bottom line
- Specific demographics/populations are most likely to not show
- One location has a higher no-show rate because of costly procedures that are either not covered by payers or require higher co-pay

Develop specific objectives to address whatever your analysis has uncovered. In our examples, the medical centers have the following objectives based on their operational concerns and no-show patterns:

**FIGURE 4: OPERATIONS**

**ABC Health Center**

- The medical practice would like to increase daily appointment revenue, so one objective for this medical practice is to reduce their no-show rate by 20 percent (decrease from 25 to 20 no-shows per day).
- A large percentage of their patient population have chronic conditions, so they have also set an objective to divert more staff time to create more revenue from chronic care management

**XYZ Physicians Group**

- To ensure physician productivity, the medical practice would like to proactively identify and fill cancellations for those popular dermatologists.

**Develop strategies to meet your objectives**

Once you've identified your objectives, then it's time to develop the plan for achieving those objectives. Expanding on our example, our medical centers' strategies include the following:

**FIGURE 5: STRATEGIES**

**ABC Health Center**

1. Update patient contact information with email addresses; confirm home and mobile numbers.
2. Target well-visit patients for appointment reminders/confirmations
  - a. Develop a communication and follow-up workflow to keep patients from forgetting their appointments.
3. Use an automated communication/confirmation system to help their staff free up time to follow up with chronic care patients.

**XYZ Physicians Group**

1. Update patient contact information with email addresses
2. Upgrade their appointment reminder system to a reminder/confirmation system that provides multiple communication methods and immediately notifies staff of cancellations.
3. Target the patients of those popular dermatologists at each location.
  - a. Develop a communication and follow-up process to proactively identify potential cancellations and fill those spots.

## Considerations for an effective communication workflow

In order to successfully reduce no-show rates, it's important to develop and implement a communication and follow-up workflow to ensure patients keep their appointments. This workflow can be applied to all patients or to just those patients who are more likely to forget their appointment as you may have identified during your assessment period. It all depends on your goals and how aggressive your practice wants to be in managing patient no-shows.

An effective communication workflow takes these factors into consideration:

1. Methods of communication—
  - a. Mail, email, text, voice message?
  - b. One method only or multiple methods?
2. Timing of communication—
  - a. How far in advance are messages going to be sent and why?
  - b. If using multiple methods, how far in advance for each method?
3. Message content
  - a. Do you need to share specific pre-appointment instructions?
4. Patient interaction
  - a. Will you ask patients to confirm their appointments?
  - b. Will you allow or not allow patients to request appointment cancellation?

## Advantages of using an automated appointment reminder/confirmation system to reduce the no-show rate

A number of studies—by independent researchers, medical providers and vendors—show that automating reminder processes will not add any further burden on medical staff and is an efficient means of communicating with patients, often creating cost savings. These studies have also shown that no-show rates can be improved by 20 percent or more by using automated systems.

The best automated appointment and confirmation systems are the ones that allow you to use multiple communication methods—typically email, voice messaging and text. It's important to use each communication method to its advantage (as shown in figure 7: Communication Methods and Advantages) and used effectively in a communication process or workflow.

Studies have shown that using multiple, successive methods increases the likelihood of the patient keeping their appointment.<sup>3</sup>

## Considerations for an effective follow-up process

As effective as a reminder/confirmation process can be, you will not be able to reach 100 percent of your patients 100 percent of the time. How aggressive you are in following up with the patients you're not able to reach will depend on your medical practice's goals. Experience has shown that significant no-show rate improvements can only be reached by having an effective follow-up process.

An important benefit of using automated systems is that it helps you proactively identify the patients who are most likely to not show up for their appointments, based on their interaction (or lack of interaction) with the messages. Armed with this type of data, the medical practice can target their follow-up processes to confirm or reschedule just this particular patient population, ensuring an efficient use of staff time.

Here are some things to consider as you're developing your follow up process:

- Determine what you're going to follow up on. Based on your operational or fiscal needs, determine what your priorities are for follow up. Is it based on patient demographic, appointment types, physicians, locations or other factors?
- When are you going to follow up? How much time will you give your patients to confirm their appointments?
- How will you track and report on those patients who require follow up—to ensure the practice has connected with them and the patients have been rescheduled, when needed?

Our example medical practices will create the following communication and follow-up workflows in order to help meet their objectives and plans:

**FIGURE 6: COMMUNICATION AND FOLLOW-UP WORKFLOWS**

### ABC Health Center

1. 72 hours prior to appointment: send email with confirmation/cancellation option
2. 48 hours prior to appointment: send text message and automated phone call reminders
3. Two hours prior to appointment: send text message reminder

#### Follow up:

4. For patients who cancel their appointment at least 48 hours in advance, staff will call to reschedule and begin contacting patients on the wait list to fill the open slot.

### XYZ Physicians Group

1. One week prior to appointment: send email with confirmation/cancellation option
2. 72 hours prior to appointment: If no confirmation has been received, send text with confirmation/cancellation option

#### Follow up:

3. 48 hours prior to appointment: Send automated phone call
4. 24 hours prior to appointment: Staff to call the patients who haven't received the message (because of invalid contact information) or requested a cancellation
5. For patients who request a cancellation, staff to reschedule and begin contacting patients on the wait list to fill the open slot.

## CONCLUSION

Medical practices can improve their productivity by two main means—by optimizing the schedule and by keeping patients from forgetting their appointments. Optimizing the schedule alone won't address the uncertainty that's caused by patient no-shows. Tracking and addressing no-show trends and patterns is an important factor in improving practice productivity. It's also important to develop a reminder process or workflow that will help patients remember their appointments.

Using an automated appointment communication and confirmation system can be a cost-effective and efficient way to greatly reduce patient no-show rates—which, in turn, improves physician productivity, financial stability and practice efficiency. In order to derive the greatest benefit from any automated communication and confirmation system, several important steps should be followed:

- Assess business objectives, current operations and no-show data
- Develop objectives based on this assessment
- Develop a strategy/plan to achieve those objectives
- Develop effective communication workflow and follow-up processes to meet your objectives

### FIGURE 7: COMMUNICATION METHODS AND ADVANTAGES

#### Mailed communication

- More information can be included
- Patients can read and re-read information at their own convenience
- Easy to provide supplementary information, links

Considerations for the practice: No record of delivery, need follow-up workflow and documentation process.

#### Interactive voice response (IVR)

- Patient can connect to appointment scheduler immediately
- Patient can connect to the appropriate department or person if there are questions

Considerations for the practice: need to keep instructions and menu prompts short

#### Email

- Less disruptive, patient can read it at their convenience
- Self-documenting
- More information can be included
- Patients can read and re-read information at their own convenience
- Easy to provide supplementary information, links

Considerations for the practice: Email preventative care reminders must be generated and sent through a certified EHR system.

#### Short Message Service (SMS)

According to the Pew Research Center, 80% of U.S. adults own a cell phone and 80% of them say they send and receive text messages.<sup>4</sup> In addition, text messages have open rates as high as 98%.<sup>5</sup>

- Patients can read and re-read information at their own convenience
- Instant opt-in and opt-out
- Reliable connection

Considerations for the practice: Limited to 160 characters, so messages need to be short.

<sup>4</sup> Susannah Fox and Maeve Duggan. "Mobile Health 2012." Pew Research Center, Washington, D.C. (November 2012). <http://www.pewinternet.org/2012/11/08/mobile-health-2012/>, accessed October 2014.

<sup>5</sup> Michael Essany. "SMS Marketing Wallops Email with 98% Open Rate and Only 1% Spam." (6 August 2014). <http://www.mobilemarketingwatch.com/sms-marketing-wallops-email-with-98-open-rate-and-only-1-spam-43866/>, accessed November 2014.