



Immunization reminder and recall systems are cost-effective methods whereby children in need of vaccination are identified and contacted to come to the physician's office. Reminder systems track future appointments, whereas recall systems track missed appointments during which immunizations would have been given. Combining reminder and recall systems is a powerful method for ensuring optimal vaccination rates.

Why are reminder/recall systems important?

Good immunization practices in private offices are important because of the reliance on office-based pediatricians and family physicians for childhood vaccinations. In general, pediatricians are doing a good job delivering routine vaccines – greater than 70% of children receive their vaccines from pediatricians and greater than 80% receive vaccines in the private sector. However, more than one-fourth of preschool children lack at least 1 routine vaccination, and many adolescents are not protected against human papillomavirus and Meningococcal disease.

What are the benefits of these systems?

Using reminder/recall systems within a medical home has been shown to improve not only immunization rates but also overall health care. Children who are behind on immunizations are at greater risk of being behind on other preventive services. Studies suggest that fewer than 1 in 5 pediatric or multi-specialty group practices are using reminder/recall systems. By utilizing these systems, physicians can increase vaccination rates and promote other important clinical services, such as lead and vision screening. These systems have been shown to be effective at increasing adolescent immunization rates, over other methods.

How can reminder/recall systems be implemented?

- To implement a reminder/recall system, consider the following:
- An “immunization information gap” exists. Parents often do not know the vaccination status of their children and pediatricians sometimes perceive coverage among their patients as higher than it really is.
- Pediatricians should ask themselves, “How well am I doing at vaccinating my patients?” To know for certain, contact the local state health department to request an office assessment of coverage and follow-up.
- Organization is essential. Offices utilize varied record-keeping systems, such as postcards, telephone calls, or a variety of techniques. The key is to create a system that allows personnel to identify children in need of vaccinations. For examples on how pediatricians can implement reminder/recall systems, refer to the “Effective Models and Strategies” portion of this fact sheet.
- One size does not fit all. Successful recall systems vary from tickler files to community-based immunization registries. These systems are dependent upon office personnel's ability to utilize the system and fine-tune it to meet the specific needs of the practice.

Effective Models and Strategies

The pediatrician's role is to overcome the immunization information gap and ensure that children are vaccinated on time. By adopting the National Vaccine Advisory Committee *Standards for Child and Adolescent Immunization Practices* and AAP policy statements on immunizations, physicians can enhance their policies and practices and improve the health and welfare of children, adolescents, and their community.



The American Academy of Pediatrics (AAP) endorses reminder/recall systems through policy statements and reports. The following examples of reminder/recall systems were adapted from the work of the Task Force on Community Preventive Services.

Making Reminder/Recall Systems Work!

Physicians do not have to invest a lot of time or money to develop a successful reminder/recall system. By evaluating their resources and needs, physicians can implement a simple, effective system suited to their practice. For more information about reminder/recall systems, visit:

<http://www.thecommunityguide.org/vaccines/clientreminder.html>

Chart Reminders: Chart reminders can be as simple as a colorful sticker on the chart or can be a comprehensive checklist of preventive services including vaccinations. Reminders to physicians should be prominently placed in the chart. Reminders that require some type of acknowledgment (such as a checkmark) are more effective. **Advantages:** Inexpensive and efficient (reviewing health maintenance inventories with patients on average requires less than 4 minutes with the patients and quickly becomes part of the physician's routine). **Disadvantages:** Only reaches patients with scheduled office visits and chart reminders may be more effective in managed care organizations as compared with fee-for-service practices since cost to the patient may be a barrier to vaccination in a fee-for-service practice.

Standing Orders: A standing order is a written order stipulating that all persons meeting certain criteria (i.e., age) should be vaccinated, thus eliminating the need for individual physician's orders for each patient. **Advantages:** Easy to implement. **Disadvantages:** Only reaches patients already contacting the health care system.

Mail/Telephone Reminders: Staff phone the patient or send a postcard/letter reminding the patient that a vaccination is due and offer the opportunity for the patient to schedule an appointment. **Advantages:** 1) Phone contact can help to ensure that the message is understood and provides the opportunity to schedule an appointment, 2) reaches patients who may otherwise not have scheduled visits, 3) easy to implement, requiring minimal staff time. **Disadvantages:** 1) Relies on patient to schedule and keep appointments, 2) not useful in practices with high patient turnover or with a population that changes residences frequently, 3) may need bilingual reminders, generating the list of patients who should receive reminders may be difficult in some practices (e.g., for those without computerized records), 4) if baseline vaccination rates are high, the incremental increase in vaccination rate attained may not be worth the time and effort invested.

The following is a list of some auto-dialer vendors. Please note that the AAP cannot endorse or recommend specific products or brands. This is only meant to aid you in your selection.

Auto-dialer	Website
Call-em-all	https://www.call-em-all.com/
Call Fire	http://www.callfire.com
Televox	http://www.televox.com/appointment-reminders/
Voicent	http://www.voicent.com/autodialers.php



Expanding Clinic Hours: Expanding access can include: 1) reducing the distance from the setting to patients, 2) increasing, or making more convenient, the hours during which vaccination services are provided, 3) delivering vaccinations in settings previously not used, and/or 4) reducing administrative barriers to vaccination (e.g., "drop-in" clinics or "express lane" vaccination services). This group of strategies has been very effective in increasing immunization rates when combined with other strategies, such as patient reminder/recall, less clearly so when used alone. **Advantages:** Efficient, may help increase access to care among lower income and other disadvantaged persons. **Disadvantages:** Increased staff time and expense, new clients may lack records, or recall, of previous immunizations.

Computerized Immunization Reminders: The computer can print a list of possible reminders that appear on a patient's record. The software can be programmed to determine the dates that certain preventive procedures are due or past due and then print computer-generated reminder messages, usually overnight, for patients with visits scheduled for the next day. **Advantages:** effective, inexpensive once computerized system is in place, efficient. **Disadvantages:** 1) Only reaches patients with office visits, 2) may be less effective in fee-for-service practices since cost to the patient may be a barrier to vaccination in a fee-for-service practice.

Card file: A 3x5 card file system can be used to track dates vaccines were given and due dates for future vaccines. Office personnel can review these cards to determine missed appointments and follow-up with parents.

Phone lists: Phone lists can be used to follow-up with patients who have future immunizations or have missed appointments. By tracking patients whose immunizations are 6 months away and contacting them as their appointment nears, physicians show parents they are aware of their children's needs.

Clinical Assessment Software Application (CASA): The CASA is a database developed by the Centers for Disease Control and Prevention (CDC) to help immunization providers assess immunization rates in their offices. This database can help physicians determine the immunization status of children at critical age markers and antigen -specific levels, as well as the percentage of children who drop out of the vaccination schedule and miss opportunities for immunization. The CASA also produces reports and provides programmatic feedback, and programs are available from the National Immunization Program at <http://www.cdc.gov/vaccines/programs/cocasa/default.htm>.

Local or state health departments: Using a modem to link to the local health department registry allows staff to check or update immunization records daily. This ensures that there are no missed opportunities at any location.

Multiple systems: It might be necessary to use several systems. For example, office personnel can ask parents to address reminder postcards. These postcards can be sent prior to the next appointment, and patients who fail to show up can be placed in an "alert" file and called to set up a new appointment. Additional reminder/recall systems include: performance feedback, patient education, and using patient health records. For more information on these and other reminder/recall systems visit www.aap.org/immunization or www.cdc.gov/vaccines.