



Pediatric Vaccine Management Success

A COMPREHENSIVE GUIDE

Table of Contents

- 3 Strategies for Vaccination Success
- 4 The Cost of Vaccines
- 5 The Best Way to Order Vaccines
- 6 Inventory Management
- 7 Vaccine Audits
- 8 Minimizing Vaccine Waste
- 10 Vaccine Refrigerator Management
- 11 Cost Center Considerations for Vaccines



Strategies for Pediatric Vaccination Success



For pediatric practices, vaccine management is about more than simply protecting the health of their patients. It is also about making the most of the resources available to healthcare providers. Vaccines are crucial for preventing serious infections and diseases in children—but their acquisition, management, storage, and administration present a number of obstacles and expenses that also need to be considered.

This guide explores the importance of proper vaccine management for pediatric offices, including vaccine costs and considerations, optimal ordering processes, the value of vaccine audits, ideas for reducing vaccine waste, best practices for refrigeration management, and cost center considerations.

“*Vaccines are typically a pediatric practice’s second largest expenditure, after staff wages. Managing inventory helps you get better control on waste and other unaccounted doses. It also means you’re billing for every dose you give: **even a few unbilled doses a month means thousands of dollars lost every year.** With vaccine prices going up, and with newer vaccines hitting the market at a higher price point than ever before, practices can’t afford to not manage their inventory.*”

Suzanne Berman, MD, FAAP, *Medical Director of Informatics & Instruction at Office Practicum*

The Cost of Vaccines

Vaccines are a cornerstone of pediatric care, but they come at a [cost](#). For independent pediatric practices, vaccines represent one of the largest expenses in a budget. That's why it's essential to understand the costs involved in purchasing vaccines.

To manage this cost effectively, practices can consider:



BULK ORDERING

Independent pediatric practices can often reap substantial financial benefits by ordering vaccines in bulk. This approach leverages economies of scale and allows practices to take advantage of volume discounts offered by vaccine manufacturers. By consolidating orders, practices can secure vaccines at a reduced per-dose cost, leading to significant savings over time.



VACCINES FOR CHILDREN PROGRAM

To further alleviate the financial burden, pediatric practices can participate in the [Vaccines for Children Program \(VFC\)](#). This federal initiative aims to ensure that all children, regardless of their family's financial circumstances, have access to essential vaccines. The CDC purchases vaccines at a discounted rate and provides them at no cost to registered VFC providers. By enrolling in this program, pediatric practices can access a steady supply of vaccines without bearing the full cost, thereby broadening vaccine access and enhancing public health.



COST MONITORING AND INVENTORY MANAGEMENT

Effective cost management also hinges on vigilant monitoring of the vaccine inventory. By maintaining a comprehensive record of the vaccines on hand, their expiration dates, and usage rates, practices can reduce waste and prevent vaccines from reaching their expiration dates unused. A well-organized inventory system ensures that vaccines are administered in a timely manner, maximizing their value and reducing financial losses due to expiration.

The Best Way to Order Vaccines

Efficient vaccine ordering is essential for maintaining a steady supply of vaccines without overstocking or understocking.

The key considerations for ordering vaccines include:

FORECASTING DEMAND

Accurate prediction of patient numbers and their immunization needs is at the core of effective vaccine ordering. To make this process more precise, pediatric practices can utilize the following strategies:

RECALL REPORTS

Pediatric practices should start by generating [recall reports](#) from their electronic health records (EHR) system to review the previous year's vaccine administration. This historical data serves as a valuable starting point for estimating the upcoming year's vaccine demand. By analyzing patient records, you can identify trends and plan accordingly.

PATIENT SCHEDULING

It's essential to consider your patient [appointment schedule](#) when ordering vaccines. By aligning vaccine orders with scheduled patient visits, you can ensure that you have the right vaccines on hand when they are needed. Seasonal trends, such as back-to-school immunizations or flu shot campaigns, should also be factored into your ordering schedule.

UTILIZING ONLINE ORDERING

Many vaccine manufacturers and distributors offer online ordering systems, simplifying the procurement process and providing real-time inventory information. Online ordering simplifies tracking and ensures that you have an accurate and up-to-date record of your vaccine inventory. Moreover, it reduces the margin for human error in manual ordering processes.

VACCINE FORECASTING

To achieve even greater precision in vaccine ordering, some practices opt for advanced tools that are found in a pediatric-specialty EHR like Office Practicum. These systems can [automate the process](#) of forecasting vaccine demand. They use historical patient data, appointment schedules, and immunization guidelines to project how many patients will need specific vaccines by the next order. By taking advantage of such technology, pediatric practices can reduce wasted doses, minimize vaccine costs, and ensure they have the right vaccines on hand when needed. Vaccine forecasting also ensures your patients are getting the right vaccines, at the right time.



Inventory Management

Efficient [inventory management](#) is a critical component of vaccine management for pediatric practices. Maintaining a well-organized and up-to-date inventory ensures that you can meet patient needs and prevent vaccine wastage. You can eliminate the manual work of tracking lot numbers on spreadsheets and transform vaccines from being a source of stress into a profit center when you [use a pediatric-specialty EHR like OP](#).

Here are best practices for effective [inventory management](#):

ESTABLISH A CENTRALIZED INVENTORY SYSTEM

Designate a specific person or team within your pediatric practice responsible for managing the vaccine inventory. A centralized approach ensures clear accountability and reduces the risk of mismanagement. This individual or team should be well-versed in vaccine storage requirements, expiration dates, and the importance of maintaining an organized inventory.

REAL-TIME TRACKING

Implement a system that allows for real-time tracking of vaccine stock. This can be achieved through electronic health record (EHR) systems. Real-time tracking provides you with up-to-the-minute information on your vaccine inventory, enabling you to make well-informed decisions about when to order new vaccines and prevent overstocking or understocking.

REGULAR AUDITS

Conduct routine inventory audits to cross-check the physical stock with your administrative records. These physical audits are essential for ensuring the accuracy of your inventory. By regularly comparing

physical stock with your records, you can uncover discrepancies, identify any instances of theft or mishandling, and prevent surprises when vaccines are needed. Audits also provide an opportunity to update records and dispose of any expired vaccines.

IMPLEMENT A BARCODING SYSTEM

Using a barcoding system makes your inventory tracking process more efficient, accurate, and less error-prone. Each vaccine vial is labeled with a unique barcode, which can be scanned to update inventory records. Barcoding ensures that the right vaccine is administered to the right patient, reducing the risk of mix-ups and errors.

FIRST-IN, FIRST-OUT (FIFO) APPROACH

Adopt the FIFO approach for vaccine storage. This means that vaccines with the earliest expiration dates are used first. By adhering to this principle, you reduce the risk of vaccines expiring unused. Proper organization and regular monitoring of vaccine expiration dates are crucial to successful FIFO implementation.

Vaccine Audits



Regular vaccine audits ensure a pediatric practice follows the right vaccine schedules that align with medical guidelines. This also helps parents feel confident that their children are getting vaccines at the right times and in the right way. **Other benefits of vaccine audits include:**

✓ QUALITY ASSURANCE

Audits help maintain the quality of vaccines stored and administered, ensuring they are handled properly, stored at the correct temperatures, and administered safely to patients. This meticulous oversight minimizes the risk of vaccine waste due to expired or improperly stored doses, maintaining the efficacy of immunization programs.

✓ RISK MITIGATION

By conducting audits, pediatric practices can detect and mitigate potential risks associated with vaccine administration, reducing the chances of errors or missed vaccinations. This proactive approach not only safeguards individual patients but also protects the practice from liabilities associated with incorrect vaccine handling or administration.

✓ IDENTIFYING GAPS

Audits can reveal any gaps in vaccination records, allowing the practice to reach out to families and patients who may be overdue for vaccinations, which in turn improves overall immunization rates. By proactively addressing missed or delayed vaccinations, the practice contributes to community immunity and reduces the spread of preventable diseases.

✓ PATIENT SAFETY

Ensuring accurate and up-to-date vaccination records improves patient safety by minimizing the risk of vaccine-preventable diseases and their complications among children. This comprehensive approach fosters a safer healthcare environment for children, offering them protection against a range of preventable illnesses.

✓ EDUCATIONAL OPPORTUNITIES

Audits can serve as educational tools for staff, providing insights into best practices for vaccine storage, handling, and administration. This continuous learning fosters a culture of excellence within the practice.



Minimizing Vaccine Waste

Minimizing vaccine waste is a crucial aspect of efficient vaccine management for pediatric practices. Wasted vaccines not only represent a financial loss but also a missed opportunity to protect children from preventable diseases.

Here are some strategies to minimize vaccine waste:

PROPER STORAGE

Ensure vaccines are stored at the recommended temperature and monitor your vaccine refrigerator regularly to prevent spoilage. Deviations from the recommended temperature range can lead to the loss of vaccine potency and efficacy.

PROPER HANDLING

Ensure that vaccines are handled properly to prevent contamination and spoilage. Proper handling includes using clean syringes, sterile techniques, and avoiding double-dipping needles. Your staff should be well-trained in these best practices to minimize the risk of errors and maintain vaccine quality.

BATCH VACCINATION

Administering vaccines in batches is a strategy aimed at reducing the risk of partial vials being discarded. When multiple children are due for the same vaccine, scheduling them together can help maximize the use of an entire vial efficiently. This approach minimizes waste and ensures that vaccines are used to their full potential.

TRAINING AND EDUCATION

Train your clinical staff on proper vaccine handling and administration to minimize errors that can lead to waste. Emphasize the importance of accuracy and attentiveness. Regular training and refresher courses can help ensure that your staff remains proficient in vaccine management practices.

MONITOR EXPIRATION DATES

Regularly checking vaccine expiration dates is a fundamental component in preventing vaccine waste. Prioritize the use of vaccines that are closer to their expiration dates to prevent them from going unused. By using vaccines with earlier expiration dates first, you can reduce the likelihood of vaccines expiring before administration.

RETURN OR SWAP PROGRAMS

Some [vaccine manufacturers](#) offer [return](#) or swap programs for unused or expiring vaccines, which can help reduce financial losses. This valuable option can significantly reduce financial losses for pediatric practices. By taking advantage of these programs, you can return vaccines that you no longer need or swap expiring vaccines for fresh stock, optimizing your vaccine inventory.

RECALL PATIENTS

[Recall patients](#) who missed their [scheduled immunizations](#) promptly, so vaccines are used before their expiration date. In addition to reducing waste, your [patients also benefit by staying protected](#) from infectious diseases, which is the primary goal of immunization.



OP's recall feature has been invaluable. Ensuring that our patients are up-to-date on vaccines and well visits is paramount to providing good care. It has also been crucial to our practice's steady revenue, without which we would have been unable to continue serving our community.

Vania Picolomoni, Office Manager, Sacoto Pediatrics





Vaccine Refrigerator Management

Proper vaccine storage is critical to maintaining their potency.

Pediatric practices should:

INVEST IN APPROPRIATE REFRIGERATION

The choice of a refrigerator is crucial to ensuring vaccine potency. Pediatric practices should invest in specialized [medical-grade refrigerators](#) designed specifically for vaccines. These refrigerators maintain a consistent temperature range, often between 2°C to 8°C (36°F to 46°F), which is essential for vaccine stability. Regular household refrigerators may not provide the level of temperature consistency required for vaccines.

ORGANIZE INVENTORY

A well-organized vaccine inventory is a fundamental part of proper refrigerator management. Keep vaccines neatly organized, with clear labels indicating the type and expiration dates. This organization prevents mix-ups and vaccine wastage due to misidentification.

REGULAR MAINTENANCE

Schedule routine maintenance for the vaccine refrigerator to ensure it is functioning correctly. This maintenance may include cleaning, checking for temperature consistency, and verifying that the temperature monitoring equipment is functioning as intended. Maintain a log of maintenance activities for record-keeping and compliance purposes.

CONSIDER A REFRIGERATION MONITORING SERVICE

In addition to regular maintenance, pediatric practices can enhance vaccine refrigerator management by investing in a [refrigeration monitoring service](#). These services offer 24/7, real-time monitoring of the vaccine storage unit. If the temperature deviates from the acceptable range, the system immediately alerts designated personnel, helping prevent vaccine degradation. Real-time monitoring systems can send alerts via email, text message, or a mobile app to ensure that any temperature excursions are addressed promptly. This proactive approach reduces the risk of vaccine spoilage.



Cost Center Considerations for Vaccines

Highlighting vaccines as a cost center item is an important aspect of efficient vaccine management in pediatric practices. The financial investment required to procure, store, and administer vaccines is substantial, and it's essential to manage these expenses efficiently.

Here's how pediatric practices can address vaccines as a cost center item:



COST ALLOCATION

Clearly define the budget allocated to vaccines within your practice. This budget should include not only the cost of the vaccines themselves but also expenses related to storage, administration, and staff training.



BUDGET PLANNING

Develop a comprehensive budget plan that takes into account the need for ongoing vaccine procurement and the associated costs. This budget should be reviewed and adjusted as needed to accommodate changes in vaccine schedules and demand.



FINANCIAL TRANSPARENCY

Maintain transparency in your practice's financial management by tracking and documenting all vaccine-related expenses. This includes the initial purchase price of vaccines, refrigeration equipment and maintenance, staff training costs, and any costs associated with vaccine recalls and campaigns.



UTILIZE DISCOUNTS AND ASSISTANCE PROGRAMS

Leverage available discounts, insurance programs, and manufacturer-sponsored assistance to offset some of the costs associated with vaccines. Explore opportunities to negotiate better pricing with suppliers, especially when making bulk orders.



INSURANCE BILLING

Ensure that you are appropriately billing insurance payers for the administration of vaccines. Accurate and timely billing can help recoup some of the expenses associated with vaccine administration.



OPTIMIZE EFFICIENCY

Streamline vaccine procurement and administration processes to minimize staff time and effort. Efficient vaccine management reduces the overall cost of handling these critical resources.



COMMUNITY OUTREACH

Collaborate with local health departments or community organizations to explore potential funding or grants that may support vaccine initiatives within your practice.



EDUCATE AND ENGAGE

Educate your staff and patients' families about the importance of vaccines in preventing illnesses. This can lead to increased patient compliance, which ultimately reduces the financial burden caused by vaccine-preventable diseases.

By recognizing vaccines as a cost center item and implementing strategic measures to manage these costs, pediatric practices can ensure they are making responsible financial decisions while continuing to provide essential immunization services. Efficient vaccine management is not only crucial for the practice's fiscal health but also for safeguarding the well-being of the young patients who depend on these [life-saving interventions](#).



Pediatric Vaccine Management Success

A COMPREHENSIVE GUIDE

Office Practicum has always been a champion for pediatricians and the children, families, and caregivers they serve. Committed to reducing the complexity of running a pediatric practice, OP's pediatric-certified EHR and practice management platform is designed for the clinical, operational, and financial needs of pediatric practices with solutions that support the physical, emotional, and mental health care needs at all stages of a child's growth.

OP's pediatric EHR, practice management, and revenue cycle management services are offered alongside telehealth, 24/7 answering services, website design and SEO services, and other practice marketing tools. Together, they provide a full suite of solutions pediatricians need to grow and support their practice. As a dual-certified EHR vendor, we continue to ensure compliance with all of our policies and procedures to ensure compliance with the 21st Century Cures Act. Today, Office Practicum supports over 6,500 providers across 48 states. For more information, visit us at www.officepracticum.com



WHAT IT MEANS TO BE DUAL-CERTIFIED

Being the first pediatric-specialty EHR to receive Drummond's Pediatric Health IT Certification with advanced achievement in six core areas is a testament to our commitment to building technology solutions uniquely for pediatric needs. As a pediatric-specialty EHR, everything we do is for the pediatric community. OP functions exclusively to support the care needs of kids – something we know is missing from generic EHRs.

The support we offer isn't limited to our software functionality. We also know the complexity and nuances for pediatricians when it comes to sharing health data and maintaining an accessible central record of pertinent information and confidentiality. Meeting and exceeding ONC compliance as a certified EHR is one way we go the distance to support the providers who depend on us to stay on track with industry changes.