The Business Case for Pricing Immunization Administration
In a Federal or State Supplied Vaccine Environment

One of the goals of the American Academy of Pediatrics (AAP), shared by the American Academy of Family Physicians (AAFP) and the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP), is to promote maximum immunization coverage for all infants, children, adolescents, and young adults. To achieve this goal, physicians must be paid a fee that includes three components: the entire costs (direct and indirect) of vaccine product-related expenses, vaccine administration expenses, and a realistic margin for overall overhead expenses.

AAP Endorsed Principles for Enhancing Access to Vaccines for Children (VFC) Immunizations

To optimize access to the VFC program, the following principles are proposed:

1. Federal and State vaccine policies should support the VFC program and no policy should inadvertently or deliberately decrease opportunities for vaccine distribution and immunization administration.

2. All stakeholders (vaccine manufacturers, payers, providers, local, state and federal agencies and programs) should cost share the resources to supply and store vaccines for VFC including appropriate storage units (refrigerators and freezers), temperature monitors, locks and alarms. Pediatricians should not be financially liable for storage accidents that are outside of the practice’s control (i.e., power disruptions, weather calamities, acts of God, etc.) and not due to gross negligence by the practice.

3. State VFC programs must ensure timely and accurate verification of VFC eligibility that does not place undue administrative and financial burden to physician practices. There must be safeguards to protect and limit liability (including financial) to the physician practice from incorrect eligibility information by the family and/or VFC program.

4. Pediatricians should not be penalized for swapping of vaccines to correct supply issues between private purchase, VFC, CHIP, 317 funded or Medicaid vaccine supplies.

5. As fiduciary agents of VFC supplied vaccines, pediatricians should be accountable for reasonable tracking methodology of vaccines in their practice that does not place an undue or unnecessary administrative or financial burden to the practice.

The pediatric practice is the backbone of the immunization delivery infrastructure. It is a business venture that must run on sound, generally accepted business principles to remain solvent and vaccine purchase, storage, maintenance, counseling, administration, and overhead expenses related to these activities are among the top expenses for the pediatric practice. Private physician practice for children, as we know it, will fail if the total cost of providing immunizations exceeds payments for that service. Therefore, payments from public and private sector payers must ensure recovery of the total direct and indirect practice expenses, including the time spent counseling families on the indications for and potential adverse effects of each vaccine product.

Federal and state provided vaccines represent benefits and challenges for vaccinating children. In the Vaccines for Children (VFC) program, a federal program administered by the states, the vaccine product is provided at no cost to physician offices to administer to children meeting eligibility criteria. Some states have created universal purchase programs, which purchase all vaccine for all children in the state and distribute it to immunization sites, including pediatric practices. The greatest benefit of the VFC and universal purchase programs is that the vaccine product is provided to practices at no upfront cost, thus relieving the provider of the financial outlay to purchase the vaccine product. However, practices incur additional overhead expenses for vaccines, including storage, maintenance, inventory, administration, and vaccine spoilage and loss. In the private sector, those expenses would be covered through the vaccine product payment. As the vaccine product payment does not exist for VFC vaccine or in a universal purchase state, all overhead costs related to the vaccine product still must be paid either through enhanced payment of the immunization administration fee, or some other arrangement by the payer. It is important for payers, particularly for public payers, to recognize and cover all costs associated with the vaccine and its administration, even if the vaccine product is provided at no cost.

Immunization Administration Fees

The Centers for Medicare and Medicaid Services (CMS) uses its Medicare Resource-Based Relative Value Scale (RBRVS), which assigns relative value units (RVUs) to services based on the resources utilized. The RVUs of a Current Procedural Terminology (CPT) code take into account the physician work, practice expenses, and professional insurance liability expenses associated with that service. For immunization administration, these components are detailed below.
1. **Physician Work Component:** The total value of physician work contained in the Medicare RBRVS physician fee schedule includes:

- Physician time required to perform the service
- Technical skill and physical effort
- Mental effort and judgment
- Psychological stress associated with the physician’s concerns about the iatrogenic risk to the patient

2. **Practice Expense Component:** Medicare RBRVS uses both direct and indirect practice expenses to determine practice expense RVUs, including the resources used within the facility or physician’s office (or patient’s home) in providing the service. The practice expense component of the immunization administration fee includes: 1) clinical staff time (RN/LPN/MA blend, including time for vaccine registry input, refrigerator/freezer temperature log monitoring/documentation, and refrigerator/freezer alarm monitoring/documentation); 2) medical supplies (1 pair non-sterile gloves, 7 feet of exam table paper, 1 OSHA-compliant syringe with needle, 1 CDC information sheet, 2 alcohol swabs, 1 band-aid) and; 3) medical equipment (exam table, dedicated full size vaccine refrigerator with alarm/lock [commercial grade], and refrigerator/freezer vaccine temperature monitor/alarm and/or back-up system, and continuous logging/monitoring devises that must be regularly calibrated and certified).

3. **Professional Liability Insurance Expense Component:** The professional liability insurance RVUs assigned to a code are based on CMS historic malpractice claims data.

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**Additional Overhead Costs Related to the Vaccine Product**

Maintaining a vaccine inventory incurs costs, whether the vaccine is publically or privately purchased. These vaccine related costs to the physician practice are traditionally covered by payers (i.e., patients, third party payers) as consumers of the vaccine product and immunization service. Because vaccine product is not traditionally billed in a VFC or state supplied vaccine environment, these costs must be covered with enhanced payment for immunization administration or other arrangement.

- **Personnel costs for ordering and inventory:** Medical office staff (clinical and administrative) time to monitor vaccine stock; place orders; prepare reports as required; review safe storage procedures are practice expenses that are not included in the practice expense component for immunization administration RVUs.
- **Storage costs:** Vaccines must be stored at very specific temperature ranges and, therefore, require special monitoring and storage equipment. The practice expense component of the total immunization administration code pays for part of the vaccine storage costs; however, there are certain expenses that are not included that must be compensated: freezer(s), freezer lock(s), freezer alarm system(s), and generators for continued electrical supply (all of which are depreciated).
- **Insurance against loss of the vaccine:** Professional liability malpractice insurance does not cover vaccine product, so additional insurance coverage is needed by the practice. This is especially important as states implement recovery programs if a practice can no longer use their vaccine stock due to disasters, equipment failure, etc.
- **Recovery of costs attributable to uncontrollable circumstances:** If practices are held accountable for lost vaccine, this could include situations of drawing up the vaccine and having the patient/family reconsider and refuse or a loss of dose that may occur in attempting to vaccinate an uncooperative/combative patient.
- **Federal or state-specific requirements:** In an environment where vaccine is supplied, there are frequently additional inventory and reporting requirements, which adds staff time that must be compensated appropriately.

Pediatricians must receive adequate payment to cover the total direct and indirect expenses of the vaccine product and the immunization administration service. To account for the indirect (overhead) vaccine expenses, the AAP recommends vaccine payments to be at least 125% of the vaccine cost as reported by the Centers for Disease Control (CDC) vaccine price list for the private sector.1,2 One method to ensure payment of vaccine related expenses in a VFC or state supplied vaccine program would be to enhance payment of the Medicare Resource Based Relative Value Scale (RBRVS) physician fee schedule rate for each immunization administration code. For state supplied vaccines, the payment would cover the total relative value of the immunization administration plus the additional overhead costs of the vaccine product. At a minimum, this rate would be at least 100% of the Medicare Resource Based Relative Value Scale (RBRVS) physician fee schedule rate for each immunization administration code3 plus an additional percentage to cover the additional overhead costs of the vaccine product An alternative to this method may be paying on the reported vaccine code a surcharge that reflects the overhead expenses of the vaccine (but not the acquisition cost since the vaccine is state supplied) with separate payment for the immunization administration.

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**Pediatric practices are the public health infrastructure for the nation’s childhood immunization program. It is imperative there be appropriate payment for the vaccine and immunization administration for pediatricians to participate in immunization efforts. Pediatric practices will fail if immunizations are not adequately paid. Complete coverage by payers for the cost and administration of childhood immunizations with a margin for practice overhead is necessary to support immunizations.**

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**References:**


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