



**University of Rochester/Highland Hospital
Family Medicine Residency Program * Rochester, NY**

Program Director: Stephen H Schultz, MD
Program Contact: Doug Stockman, MD – Medical Director
No. of Residents: 24
Patient Base: Total 13,313; Children (0-3): 685
Reporting Period: January 1, 2008 to December 31, 2008
Number Audited: 93 children (age 19-35 months)

Overview

In 2008 childhood vaccine compliance rates reviewed at Midland Family Medicine Residency Program exceeded the US Overall NIS Compliance Rates. By instituting the five program elements described below our program achieved an even greater compliance rates with an average 7% increase in compliance rates across all vaccines.

Programs/Processes Instituted

1) Electronic Medical Record (EMR)

* The medical records for all children up to three years old can be found exclusively in the EMR. All documents from outside organizations, such as the Monroe County Health Department's immunization clinic, are scanned in to the EMR within 24 hours.

* Nurses document all immunizations in the EMR before the end of their shift.

* Computer access to the EMR is available in each exam room.

2) Immunization Schedule

* The attached immunization schedule is available both electronically and on paper in each of the 36 exam rooms.

3) Immunization Outreach Worker (ORW)

* The ORW uses an Excel spreadsheet to track outreach efforts for all children in the practice ages birth to 24 months.

* When a child is behind on immunizations or a well-child check (WCC) the immunization ORW follows the protocol described below:

*2 phone calls

*2 letters

*2 home visits

*offer transportation to an appointment. The outreach worker's car is equipped with a car seat for safe transportation of infants and toddlers.

* Each time a child between the ages of birth and 24 months comes to the office the ORW fills out the attached immunization tracking sheet and gives it to a medical assistant (MA). The MA attaches the tracking sheet to each encounter form and alerts the provider that immunizations are due.

- * The ORW prepares quarterly statistical reports regarding WCC and immunization compliance.
- * To minimize costs, the ORW is a part-time employee that we share with another pediatric practice across town.

4) Reviews, In-services, Team Meetings

- * Annual AFIX review.
- * Annual teaching sessions for residents and faculty with local immunization expert.
- * Providers, residents, nurses and MAs each have their own monthly meetings.

5) Nursing Team Efforts

- * Mothers with Medicaid or no insurance are encouraged to apply to insurances that provide transportation and referred to facilitated enroller or social worker for assistance as appropriate.
- * Nurses use task feature of EMR to remind each other to follow up on children that are behind.
- * Nurses double check the EMR immunization history to make sure providers order the correct immunizations for each visit.
- * Nurses review immunizations for each child that comes in for biannual Women with Infants and Children (WIC) appointment.

HFM Immunization Schedule – 2008 (Pentacel)

	2 Mos	4 Mos	6 Mos	12 Mos	15 Mos	18 Mos	2 Yrs	3 Yrs	4-5 Yrs	6-10 Yrs	11-18 Yrs
Pentacel (DTaP/PPV/HIB)											
Initial series at 2, 4, and 6 months. Booster at 15 months, when supplies available. If give at 15 months, do not give 18 mo DTaP					High 15 mos. Do not give 18 mo DTaP						
Hep B											
Birth dose in NBN. Full doses at 2 and 6 months. Give dose at 4 months only if NBN dose cannot be confirmed as given											
Prevnar											
4 shot series at 2, 4, 6 & 15 mos. If starts >6 mos two shots 6 wks apart and 12 mos. If starts ≥12 mos two shots 6 wks apart. If starts >2 yrs. one shot. Only given >3 yrs if hi-risk (recor. OMPE tubes, nat. Amer., in day care).											
Rotarivir (Rotarix)											
3 oral vaccine series at 2, 4, & 6 mos. 1 st dose >6 and up to 14 6/7 weeks. Last dose no later than 32 weeks. Interval between doses 6-10 weeks											
MMR											
Give at 12 mos of age. Give catch-up vaccine for anyone who has had only one vaccine documented. If no vaccine history check titers.											
Varivax (Varicella)											
Given at 12 mos of age. Could also get at 4-5 years of age if not getting MMRV. Give catch-up vaccine for anyone who has had only one vaccine documented. If no vaccine history check titers.											
Hemacrix A											
2 doses 6 months apart at 12 and 18 months. Can start at any age after 12 mo. Must allow 6 months apart.				12 months	18 months						
DTaP											
Booster doses at 18 months and pre-kindergarten (4-5 yo). Do not give 18 mo DTaP if give Pentacel at 15 mo											
TdV											
Routine booster dose age ≥4 yrs. Only need total of 3 shots if #3 given ≥ 4 yrs.											
Influzona											
Children aged 6 mos to 18 yo,											
Adacel Boostrix (Tdap)											
All children at 11-12 yr WCC. Catch-up teens at other visits if ≥2 yr since last Td (esp. those who are expecting to be pregnant, parents of young child, living with someone who is chronically ill, or HCW). Boostrix can be given to 10 yo											
Menactra (MCV4)											
Menactra given to all children aged ≥11 yrs (with or without risk factors).											MCV4
Gardasil (HPV)											
Given to all women as 3 vaccine series (0, 2, and 6 months apart) starting at age 11-12 yr WCC. Catch-up any teen who did not start series at 11-12 years of age. Quick sched. Dose 1 to 2 (36+ days apart), Dose 2 to 3 (80+ days apart)											0, 2 and 6 months apart
Pneumovax											
Heart/chronic pulmonary dz, diabetes, chronic liver disease/cholest, CKD, HIV/immunosuppression, SS disease, functional anatomic asplenia, & terminal complement deficiency (these children should receive Prevnar also)											
Decavac (Tetanus/Td)											
Used for catch-up in children > 7yrs. Those children should also receive one dose of Adacel (Tdap) (usually the initial dose).											
Vaccine recommendations for all children in age categories											
Given at these ages only if catch-up needed or for children with risk factors.											
Due to Pentacel shortage, may need to give DTaP at 18 months instead of Pentacel at 15 months											
Not given at these ages because not approved or not needed.											

Modified by D. Stockman, from Med-Peds Calver Schedule

Patient Name:	DOB:	MR:
Provider:	Suite:	DOS:
		Nurse:

**Immunization Order Sheet
Highland Family Medicine**

Rcmd'd Vaccine	Prov. Order	Childhood Vaccine	Nurse Initial
		Pentacel (DTaP/IPV/HIB)	
		Hepatitis B	
		Prevnar	
		Rotateq (Rotavirus)	
		MMR	
		MMRV	
		Varivax (Varicella)	
		Hepatitis A	
		DTaP	
		IPV	
		Influenza	
		PediaRix (Dtap/IPV/HepB)	
		ActHIB	
Rcmd'd Vaccine	Prov. Order	Adolescent/Adult Vaccine	Nurse Initial
		Adacel/Boostrix (Tdap)	
		Menactra (MCV4)	
		Gardasil (HPV)	
		Pneumovax	
		Decavac (Tetanus/Td)	
		Influenza	
		Preservative Free (OB)	
		TwinRix (Hep A and B)	
		Zoster	

Prepared by: _____