



Wyeth Immunization Awards

Award Track: 2009 System Implementation

Family Medicine Residency of Idaho * Boise, ID

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No. of Residents: 32
Patient Base: Total: 12,000; Children (0-3): 1583
Children Impacted: 1800 (medically underserved age 18-35 months)

Overview

The Family Medicine Residency of Idaho has long viewed itself as a "safety net" medical care provider in Ada County. Our clinic provides care to an underserved population -- 48% of our overall patient population has Medicaid and 11% are uninsured. Within our pediatric patient population, 88% are insured through Medicaid. As detailed below, we are seeing local effects of global economic turmoil that are leading to even more need from the underserved for our services. This need exists in a state already struggling with providing adequate routine preventive care to our citizens -- Idaho currently ranks 50th at delivering childhood immunizations as determined by the CDC.

Idaho state tax revenues have fallen dramatically over the past year leading to recent widespread reductions in state spending. The Idaho Health & Welfare Department has undergone substantial cuts to both the ongoing 2008-09 budget and the proposed 2009-2010 budget. As a result of these cuts, the Department made the decision to no longer offer routine infant/child immunizations. Beginning on January 1, 2009, patients were directed from State Health Offices to their "assigned" Medicaid provider to receive their well child care and immunizations. Our local branch of the State Health Department (Central District Health in Ada County) has sent us data indicating that 17% of their current patient population is actually assigned under Medicaid to our clinic as a medical home. This represents approximately 300 kids and places us as the single largest medical home for their patient population. We currently already serve approximately 1500 children under the age of three in our clinic. We anticipate steadily increasing pediatric patient appointment demand as these additional patients transition to our clinic for their immunizations. We also anticipate increasing demand due to the increasing number of children eligible for Medicaid due to economic hardship affecting their families.

As we face this increasing demand, our clinic has been simultaneously facing challenges with access to care. We have struggled with balancing resident, mid-level and faculty availability with patients' acute and chronic care needs. In order to better meet our patient needs, we implemented open-access scheduling in February 2009. We feel that this will improve no-show rates compared to remotely scheduled preventive care and follow-up chronic care appointments. However, this is a major paradigm shift for our patients and will require significant patient education to be appropriately utilized.

In addition to starting open access scheduling, we also have recently undertaken a project to improve our access to statewide immunization data. We applied for and were recently awarded a grant from NAPNAP to develop an interface between our EMR and the statewide immunization registry system in Idaho (IRIS or Immunization Reminder Information System). Implementation of this system will occur in

the near future. We feel that this will allow us to significantly increase the accessibility of our patient's immunization data while not adversely affecting our staff's ability to perform essential clinic functions.

Proposed System

In order to meet the increasing need for immunization services in Idaho as shown above, we now propose taking the following two concrete steps if we are awarded this system implementation award:

1. ***Education of our pediatric population about open access scheduling.*** We plan to create and mail a brochure to each family with a child under the age of four years of age. This brochure will explain the process of open access scheduling and remind parents of the need to continue / complete their child's primary immunization series and four year old booster shots. We will target both English and Spanish speaking families with these brochures.

2. ***Purchase of a secure messaging system that will interface with our EMR to generate notices to families whose children are late for primary series immunizations.*** We plan to create a largely automated, systemic approach to dealing with immunization delays. We currently do not have a well functioning system to catch immunization delays. We rely on providers / nursing staff to send reminders to families who "no-show" for an immunization appointment. However, this takes significant staff time and relies on individuals to note and respond to the missed immunization visit. We feel that automating this process will significantly improve our immunization rates.

We envision generating routine EMR "immunization delay" queries for children who are one month delayed in primary series immunizations (2 month, 4 month, 6 month, 12 month, 15 month, and 18 months immunizations). The EMR query will identify such children and generate a secure message to the respective family automatically. We have selected the Kryptiq Secure Messaging System due to ability of this program to interface directly with our Centricity EMR. These messages will remind the family of the need to reschedule the immunization appointment. It will also allow for a direct reply to generate this appointment. Through implementation of this system, we feel we can capture a significant proportion of the children who are currently lost to follow-up.

Goals and Objectives

A) ***Improvement in our immunization delivery to exceed 92% in all categories listed in the immunization table in the awards application.*** One exception would be the Hib vaccine if national shortages remain in effect. We plan to track our primary immunization series completion rate to look for improvement through the processes described above. We will use internal EMR queries and data from the Comprehensive CASA reports from the Idaho Department of Health & Welfare to generate immunization series completion rates. A baseline immunization review was completed on 3/17/09 and we anticipate that this will be repeated annually to track these outcomes.

B) ***Increase in total number of children enrolled in our clinic between the ages of 0-3 years.*** We additionally plan to track our total number of children between 19 and 35 months who are enrolled for care in our clinic. We anticipate seeing a volume increase due to capture of children from the State Health Department. We anticipate using EMR queries to generate this data annually.

Current Rates of Immunizations in Medically Underserved Age 19-35 Months

VACCINE	U.S. Overall 2004, NIS Compliance %	Current Compliance Rate %
DTP/DTaP/DT (4 doses)	84.8 (+/-0.8)	82.00
IPV (3 doses)	91.6 (+/-0.7)	92.00
MMR (1 dose)	93.0 (+/-0.6)	98.00
Hib (≥ 3 doses)	93.5 (+/- 0.6)	62.00
Hep B (≥ 3 doses)	92.4 (+/-0.6)	98.00
PCV (3 doses)	73.2 (+/1.0)	96.00
PCV (4 doses)	87.5 (+/-0.7)	88.00
Varicella (≥ 1 dose)	84.8 (+/-0.8)	94.00
VACCINE SERIES		
4 DTP+3 IPV+1 MMR	83.5 (+/-0.9)	82.00
4 DTP+3 IPV+1 MMR+3 Hib	82.5 (+/-0.9)	52.00
4 DTP+3 IPV+1 MMR+3 Hib+3 Hep B	80.9 (+/-0.9)	52.00
4 DTP+3 IPV+1 MMR+3 Hib+3 Hep B+1 Var	76.0 (+/-1.0)	52.00