

## Immu-News

### March 2010

It Takes the Whole Team: Staff Roles in Immunization Welcome to **Immu-News**, the Immunization Initiatives listserv, a monthly resource for the community of participants in this project. Our topic for the month is **It Takes the Whole Team: Staff Roles in Immunization**. As you know, we've been calling each of the Project clinics over the last months and wanted to share with you some interesting ideas about who plays what part in immunization at our clinics. Of course, we all think immediately about the providers and nurses, the people most likely to administer the vaccines. But who orders the vaccines, who checks the supplies, who keeps the logs, who books the appointments, who enters the data, who tracks it, and who encourages the clients to come in to the clinic to get the shot? It could be at some clinics that one or two people do most or all of these jobs, while at other clinics, they may be divided up among three or four or more people. What works at your clinic and why? Does the hand that gives the shot know what the other hands are doing? How is recording and tracking immunization data a team effort? How can the receptionist, the billing clerk, and the outreach worker all be a crucial part of the picture? Read on for information about the following:

1. Experience: A checklist of all the different tasks necessary to arrive at your clinic's immunization goals, gathered from our recent phone calls to you.
2. Research: the collaborative approach--how successful are systems that incorporate the receptionist or the outreach worker into the immunization goals of the clinic?

First, Immu-News returns to **Grounded in Practice**, our feature highlighting the service of clinics in the Immunization Initiatives project. Community Health Partnership, in Aurora, Illinois, talks to us about their immunization practices. Grounded in Practice Community Health Partnership in Aurora, IL has been seeing patients directly for one and a half years. Prior to this, staff referred patients to other clinics with vouchers from CHP. Yearly, CHP-Aurora attends to over 2,500 patients. Their goal is to maintain a slow and steady growth. 60-70% of CHP Aurora's patients are male. The majority (75-80%) are under fifty years old and all are migrant or seasonal farmworkers. Most work in factories that handle food products during the winter months and in the landscape industry during the summer. Because the clients are mainly adult and male, the CHP immunization program is primarily an adult program. Aurora does have a small pediatric practice, and Medical Director Dr. Barnes, is working to increase the pediatric population. In addition to offering all services offered at any migrant health center, CHP has a dental clinic housed in the same building as the Aurora clinic. If patient needs treatment that Aurora cannot offer, staff helps clients find a place to go and will help ensure they receive treatment **CHP-Aurora is committed to creating a sustainable immunization program.**

- Vaccine administration is relatively new for Aurora. They began offering vaccines in 2007, but only administered a handful of vaccines in 2008. In 2009 ACIP trained CHP staff on vaccine storage and handling and administration.
- They are committed to creating a sustainable immunization program that can easily be passed on as staff transition in and out of positions. They are committed to setting incremental goals for immunization and moving forward as goals are met.
- CHP offers a sliding scale, even for adult immunizations.
- H1N1 was a "blessing in disguise" for the new CHP immunization program. The availability of H1N1 encouraged clients to think of CHP as a place where they could receive vaccines and staff took advantage of the opportunity to tell clients about other immunizations when they received H1N1.

**Screening** First steps to revamping their immunization program include the following:

- Updating medical forms to include questions about immunization.
- Adding immunization language to the script the receptionist uses when calling to remind patients about their appointments.

- Adding visual tools, such as posters in exam rooms, to help staff and patients remember to ask about immunizations.

### Monitoring

- In 2009 CHP switched to a new database; this database compiles data from the five CHP clinics. All immunization data is entered into the database and is also recorded in the patient's chart on his/her immunization record.
- Staff have set goals for adult immunizations. As they revamp their immunization program, they will begin with an initial emphasis on kids (UDS goal), but they plan to take what they learn from their experience with child vaccines and apply it to their adult program.

It Takes the Whole Team: Experience We've compiled a list of the tasks, other than actually administering the vaccine, that might, in your clinic system, contribute to the goal of up-to-date-vaccinations for all your clients:

- checking vaccine supplies
- ordering vaccines
- filling out the VFC report
- making reminder calls
- making follow-up appointments
- knowing when a patient is due for a vaccine
- putting together new charts that include immunization records
- pulling charts for the day's appointments
- entering data
- knowing what data to enter
- matching questions in your exam chart/EHR forms that pertain to data fields or questions that you need report for specific purposes (such as the UDS report) like migrant status, UTD on vaccines, age and so forth.
- Knowing where to enter it: EHR, clinic data base or central data base, paper chart, vaccine log, state immunization registry, even billing codes might be a useful way to collect data if they are entered consistently and correctly.
- knowing why it is important to enter the data. This is essential. If the billing clerk knows why that particular number or piece of information is useful in the context of the clinic operations, she/he is likely to record it carefully.
- retrieving data
- knowing what data source you access to get data you need- is the data in one, two, three, places?
- knowing how to compile this information in one place
- knowing the reporting mechanisms that can make pulling data easier for you

Are all these tasks covered at your clinic? Are there tasks not on this list that you include in your clinic? Are the tasks explicitly assigned, or is it just assumed that x will do y? Would it expedite your QI/QA goals if you were to assign these tasks to particular people, and offer brief assistance/mentoring to make sure everyone understands how their task fits into the big picture? It Takes the Whole Team: Research In the articles below, researchers looked at the contributions of non-provider staff towards specific healthcare goals around immunization. The goal of the first article was to review the relative effectiveness of diverse activities that could increase adult immunization and cancer screening. **Findings**

- "Organizational Change" was the "most potent intervention"
- "Organizational change" included "designation of nonphysician staff to do specific prevention activities."

### Questions

- What can be considered a specific prevention activity in your clinic?
- Does the billing clerk know that his/her task, entering the correct billing code for an influenza shot, is an important part of a prevention program—a specific prevention activity in your clinic?
- Or is she/he likely to see it only as part of an accounting process?

The **second** study, conducted in England in an urban setting, looks at an intervention involving a specific staff member, the receptionist, who placed reminder calls to clients. **Findings**

- Simple intervention, receptionist placing reminder phone calls to clients, increased immunizations.

#### Questions

- Would this work here, in a rural setting?
- How much time would this add to your receptionist's daily list of tasks?
- How might this task be tied in to your clinic's performance achievement goals?

The third study, conducted in a large, urban practice in England looks at expanding the role of the receptionist to include auditing some of the practice's goals. **Findings**

- Cost effective to include the receptionist in auditing some of the practice's goals.

#### Questions

- Would this work in a small community clinic or county health care department?
- Is there enough flexibility in your clinic to be able to accommodate role changes?
- Do you have the ability and authority you need to try out some of these changes?

The fourth article here looks at the role of lay outreach workers in tracking immunization rates and providing staged interventions for inner-city versus suburban populations and among white, black, and Hispanic children within an entire county in New York. **Findings**

- Method succeeded in raising immunization rates
- Outreach workers can also help reduce disparities in leading health care indicators including immunizations

#### Questions

- Are outreach workers part of your staff?
- Is tracking immunization rates an effective use of their time?

#### ARTICLES

1. **Interventions that increase use of adult immunization and cancer screening services: a meta-analysis.** Stone EG, Morton SC, Hulscher ME, Maglione MA, Roth EA, Grimshaw JM, Mittman BS, Rubenstein LV, Rubenstein LZ, Shekelle PG. *Ann Intern Med.* 2002 May 7;136(9):116. Read the full article at <http://www.annals.org/content/136/9/641.full.pdf+html> **PURPOSE:** The relative effectiveness of the diverse approaches used to promote preventive care activities, such as cancer screening and adult immunization, is unknown. Despite many high-quality published studies, practices and policymakers attempting to improve preventive care have little definitive information on which to base decisions. Thus, we quantitatively assessed the relative effectiveness of previously studied approaches for improving adherence to adult immunization and cancer screening guidelines. **DATA SOURCES:** MEDLINE, the Cochrane Effective Practice and Organization of Care Review Group register, previous systematic reviews, and the Medicare Health Care Quality Improvement Project database. **STUDY SELECTION:** Controlled clinical trials that assessed interventions to increase use of immunizations for influenza and pneumococcal pneumonia and screening for colon, breast, and cervical cancer in adults. **DATA EXTRACTION:** Two reviewers independently extracted data on characteristics and outcomes from unmasked articles. Intervention components to increase use of services were classified as reminder, feedback, education, financial incentive, legislative action, organizational change, or mass media campaign. **DATA SYNTHESIS:** Of 552 abstracts and articles, 108 met the inclusion criteria. To assess the effect of intervention components, meta-regression models were developed for immunizations and each cancer screening service by using 81 studies with a usual care or control group. The most potent intervention types involved organizational change (the adjusted odds ratios for increased use of services from organizational change ranged from 2.47 to 17.6). Organizational change interventions included the use of separate clinics devoted to prevention, use of a planned care visit for prevention, ordesignation of nonphysician staff to do specific prevention activities. The next most effective intervention components were patient financial incentives (adjusted odds ratios,

1.82 to 3.42) and patient reminders (adjusted odds ratios, 1.74 to 2.75); the adjusted odds ratios ranged from 1.29 to 1.53 for patient education and from 1.10 to 1.76 for feedback.

**CONCLUSIONS:** Rates of adult immunization and cancer screening are most likely to improve when a health care organization supports performance of these activities through organizational changes in staffing and clinical procedures. Involving patients in self-management through patient financial incentives and reminders is also likely to positively affect performance.

2. **Boosting uptake of influenza immunisation: a randomised controlled trial of telephone appointing in general practice.** Br J Gen Pract. 2002 September; 52(482): 712–716. Sally Hull, Nicola Hagdrup, Ben Hart, Chris Griffiths, and Enid Hennessy Read the full article at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1314410/?tool=pubmed> **BACKGROUND:** Immunisation against influenza is an effective intervention that reduces serologically confirmed cases by between 60% and 70%. Almost all influenza immunisation in the UK is done within general practice. Current evidence on the effectiveness of patient reminders for all types of immunisation programmes is largely based on North American studies. **AIM:** To determine whether telephone appointments offered by general practice receptionists increase the uptake of influenza immunisation among the registered population aged over 65 years in east London practices. **DESIGN OF STUDY:** Randomised controlled trial. **SETTING:** Three research general practices within the East London and Essex network of researchers (ELENOR). **METHOD:** Participants were 1,820 low-risk patients aged 65 to 74 years who had not previously been in a recall system for influenza immunisation at their general practice. The intervention, during October 2000, was a telephone call from the practice receptionist to intervention group households, offering an appointment for influenza immunisation at a nurse-run clinic. **Main outcome measures** were the numbers of individuals in each group receiving immunisation, and practice costs of a telephone-appointing programme. **RESULTS:** intention to treat analysis showed an immunisation rate in the control group of 44%, compared with 50% in the intervention group (odds ratio = 1.29, 95% confidence interval = 1.03 to 1.63). Of the patients making a telephone appointment, 88% received immunisation, while 22% of those not wanting an appointment went on to be immunised. In the control group, income generated was 11.35 pounds per immunisation, for each additional immunisation in the intervention group the income was 5.20 pounds. The 'number needed to telephone' was 17. **CONCLUSION:** Uptake of influenza immunisation among the low-risk older population in inner-city areas can be boosted by around 6% using a simple intervention by receptionists. Immunisation rates in this low-risk group fell well short of the 60% government target. Improving immunisation rates will require a sustained public health campaign. Retaining the item-of-service payments to practices should support costs of practice-based interventions.
3. **Audit in general practice by a receptionist: a feasibility study.** BMJ. 1991 March 9; 302(6776): 573–576. B Essex and J Bate To read the full article, go to <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1669421/pdf/bmj00116-0037.pdf> **Abstract:** **OBJECTIVE--**To examine whether audit can be done cost effectively by a practice's receptionist. **DESIGN--**The practice set goals for various aspects of care, and forms were devised for the receptionist to collect, analyse, and present data to assess whether these goals had been achieved in the previous year. **SETTING--**Six doctor practice in south London looking after 11,500 patients. **MAIN OUTCOME MEASURES--**Ability of receptionist to present data showing the level of attainment of the practice's goals; time spent on audit by receptionist each week. **RESULTS--**The practice set goals for immunisation; follow up of patients with abnormal cervical smears; frequency of recording of blood pressure and smoking habit; screening of patients over 75; care of diabetic patients and patients with serious mental illness; antenatal care; variations in workload; and availability of appointments. The receptionist was able to audit all these tasks in four hours a week; this increased her job satisfaction and extended her skills. A small amount of regular supervision was necessary--roughly 30 minutes a week in the first year of the study and 30 minutes a fortnight in the second--to ensure accuracy and deal with any difficulties that arose. **CONCLUSION--**The method developed enabled a receptionist to audit aspects of the practice cost effectively. There is great scope for enlarging the conventional role of the receptionist.

4. **Reducing Geographic, Racial, and Ethnic Disparities in Childhood Immunization Rates by Using Reminder/Recall Interventions in Urban Primary Care Practices** PEDIATRICS Vol. 110 No. 5 November 2002, pp. e58 Peter G. Szilagyi, MD, MPH\*, Stanley Schaffer, MD, MS\*, Laura Shone, MSW\*, Richard Barth, BS\*, Sharon G. Humiston, MD, MPH, Mardy Sandler, MSW, Lance E. Rodewald, MD To read the full article go to: <http://pediatrics.aappublications.org/cgi/pmidlookup?view=long&pmid=1241...> Context. An overarching national health goal of Healthy People 2010 is to eliminate disparities in leading health care indicators including immunizations. Disparities in US childhood immunization rates persist, with inner-city, black, and Hispanic children having lower rates. Although practice or clinic-based interventions, such as patient reminder/recall systems, have been found to improve immunization rates in specific settings, there is little evidence that those site-based interventions can reduce disparities in immunization rates at the community level. Objective. To assess the effect of a community-wide reminder, recall, and outreach (RRO) system for childhood immunizations on known disparities in immunization rates between inner-city versus suburban populations and among white, black, and Hispanic children within an entire county. Setting. Monroe County, New York (birth cohort: 10 000, total population: 750 000), which includes the city of Rochester. Three geographic regions within the county were compared: the inner city of Rochester, which contains the greatest concentration of poverty (among 2-year-old children, 64% have Medicaid); the rest of the city of Rochester (38% have Medicaid); and the suburbs of the county (8% have Medicaid). Interventions. An RRO system was implemented in 8 city practices in 1995 (covering 64% of inner-city children) and was expanded to 10 city practices by 1999 (covering 74% of inner-city children, 61% of rest-of-city children, and 9% of suburban children). The RRO intervention involved lay community-based outreach workers who were assigned to city practices to track immunization rates of all 0- to 2-year-olds, and to provide a staged intervention with increasing intensity depending on the degree to which children were behind in immunizations (tracking for all children, mail, or telephone reminders for most children, assistance with transportation or scheduling for some children, and home visits for 5% of children who were most behind in immunizations and who faced complex barriers). Study Participants. Three separate cohorts of 0- to 2-year-old children were assessed—those residing in the county in 1993, 1996, and 1999. Study Design. Immunization rates were measured for each geographic region in Monroe County at 3 time periods: before the implementation of a systematic RRO system (1993), during early phases of implementation of the RRO system (1996), and after implementation of the RRO system in 10 city practices (1999). Immunization rates were compared for children living in the 3 geographic regions, and for white, black, and Hispanic children. Immunization rates were measured by the same methodology in each of the 3 time periods. A denominator of children was obtained by merging patient lists from the practice files of most pediatric and family medicine practices in the county (covering 85% to 89% of county children). A random sample of children (>500 from the suburbs and >1200 from the city for each sampling period) was then selected for medical chart review at practices to determine demographic characteristics (including race and ethnicity) and immunization rates. City children were oversampled to allow detection of effects by geographic region and race. Rates for the 3 geographic regions and for the entire county were determined using Stata to adjust for the clustered sampling. Main Outcome Measures. Immunization rates at 12 and 24 months for recommended vaccines (4 diphtheria-tetanus-pertussis:3 polio:1 measles-mumps-rubella: 1 Haemophilus influenzae type b on or after 12 months of age). Results. Disparities by Geographic Region: Baseline immunization rates (1993) for 24-month-olds were as follows: inner city (55%), rest of city (64%), and suburbs (73%), with an 18% difference in rates between the inner city and suburbs. By 1996, immunization rates rose faster in the inner city (+21% points) than in the suburbs (+14% points) so that the difference in rates between the inner city and suburbs had narrowed to 11%. In 1999, rates were similar across geographic regions: inner city (84%), rest of city (81%), and suburbs (88%), with a 4% difference between the inner city and suburbs. Disparities by Race and Ethnicity: Immunization rates were available in 1996 and 1999 by race and ethnicity. Twenty-four-month immunization rates in 1996 showed disparities: white (89%), black (76%), and Hispanic (74%), with a 13% difference between rates for white and black children and a 15% difference between white and Hispanic children. In 1999, rates were similar across the groups: white (88%), black (81%), and Hispanic (87%), with a 7% difference between rates for white and black children, and a 1% difference between white and

Hispanic children. Conclusions. A community-wide intervention of patient RRO raised childhood immunization rates in the inner city of Rochester and was associated with marked reductions in disparities in immunization rates between inner-city and suburban children and among racial and ethnic minority populations. By targeting a relatively manageable number of primary care practices that serve city children and using an effective strategy to increase immunization rates in each practice, it is possible to eliminate disparities in immunizations for vulnerable children. Immu-News is a project of the Migrant Clinicians Network. The Immunization Initiative is funded by the Centers for Disease Control and Prevention. The Immu-News Listserv is a support service for clinics participating in the project. This is a post-only listserv, and postings will come from Immunization Initiative staff about once a month. If others at your clinic would like to be on the listserv, or if you have questions about the listserv or resources listed here, or if you would like to add something to the posts, please contact Kathryn Anderson, administrator, at [kath@healthletter.com](mailto:kath@healthletter.com). You can also contact the listserv administrator if you would like to subscribe or unsubscribe from the list.