LET'S IMMUNIZE! A Collaborative Approach

Franklin County Public Health

Hocking County Health Department

Summit County Health District

Identify an Opportunity & Plan for Improvement

1. Getting Started

The Logan-Hocking County Health Department examined current immunization rates and found they were at 61%. Data found that the primary focus should be one year olds coming back on time, decrease missed opportunities and decrease DTaP drop-off rates.

2. Assemble the Team

The health department committed the time of several managers, including the health commissioner, the nursing director and the public health coordinator. In addition, the nursing and clerical divisions involved in immunization clinics were involved.

3. Examine the Current Approach

Parents are currently reminded of immunization appointments with a comeback magnet. Parents are sent a reminder postcard two weeks prior to scheduled appointment. If they do not show - reminder letter #1 is sent one week after the missed appointment. If no response- reminder letter #2 is sent. A phone call is then made by the IAP nurse. If still no response client charts are flagged at WIC (if eligible participant). A third letter is sent if there is no response after one week; client is removed from system (Moved or Gone Elsewhere). (Figure 1)

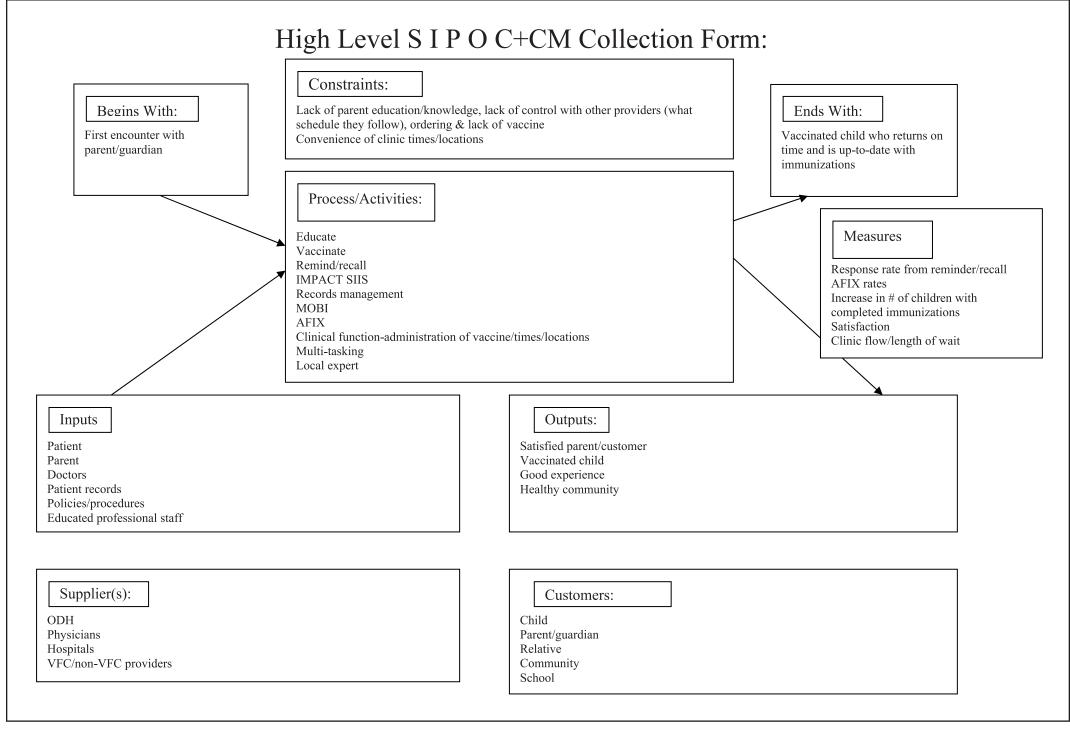


Figure 1: Current clinic flow, including Customers and Measures.

4. Identify Potential Solutions

When the team brainstormed potential solutions it was decided to conduct a survey among parents to determine any gaps in services prohibiting them from vaccinating their children.

5. Develop an Improvement Theory

If the Hocking County Health Department provides parents and physicians with needed education regarding vaccine schedules, clinic times/locations, dispel vaccine myths, contraindications, etc. Then the vaccine rate for patients at the HCHD will coincide with the Healthy People 2010 goal of 90%.

Test the Theory for Improvement

6. Test the Theory

Creation of Immunization Newsletter (Figure 2) to educate area providers on vaccine schedules, clinic times/locations, dispel vaccine myths, contraindications, latest vaccine related news, etc. Newsletters delivered to all area healthcare providers.

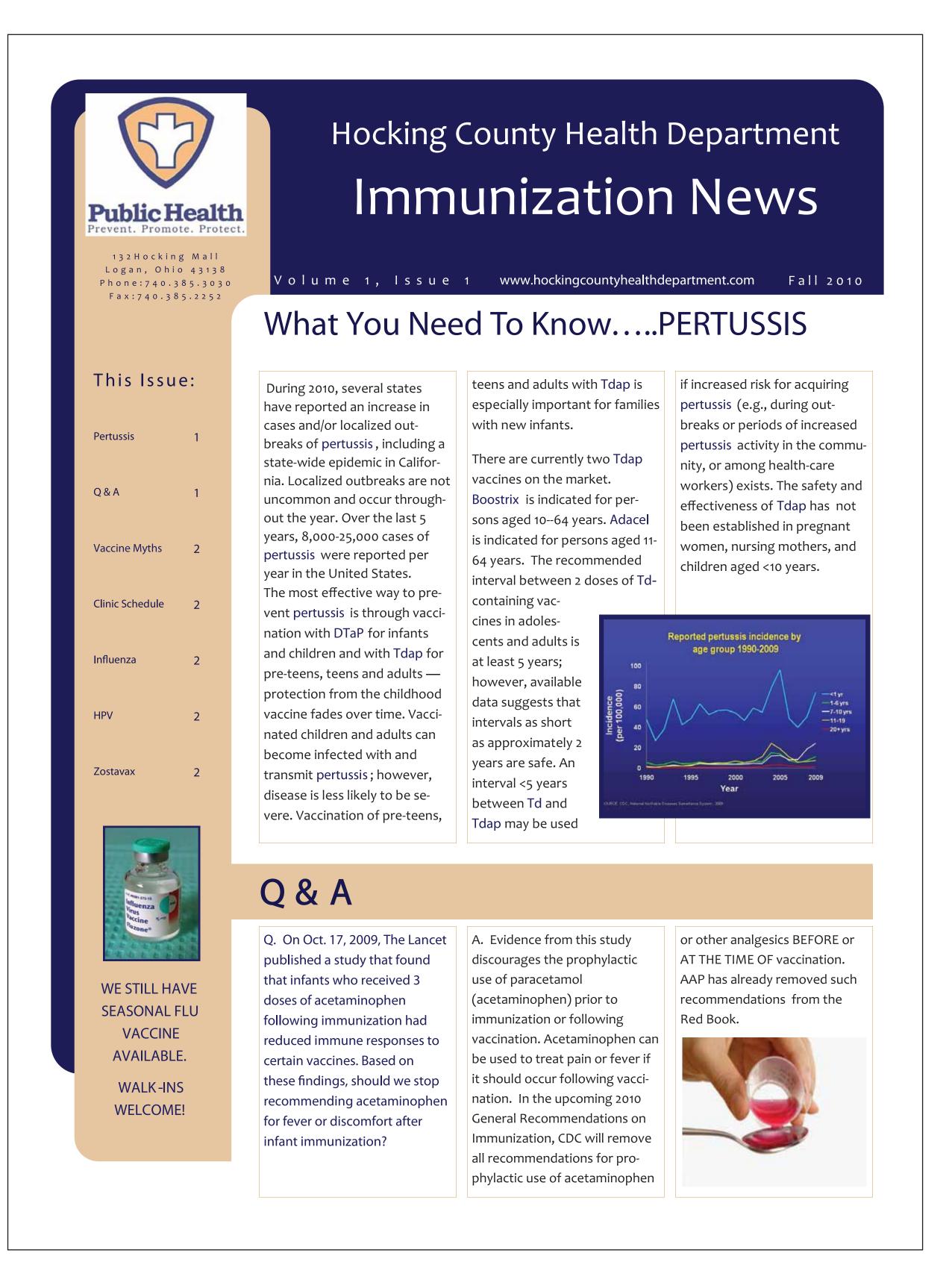


Figure 2: Newsletter

Use the Data to Study Results of the Test

7. Check the Results

Utilize AFIX data to monitor immunization rates (Figure 3). Continue to track referrals from local healthcare providers to determine if outreach methods have impact on immunization rates.

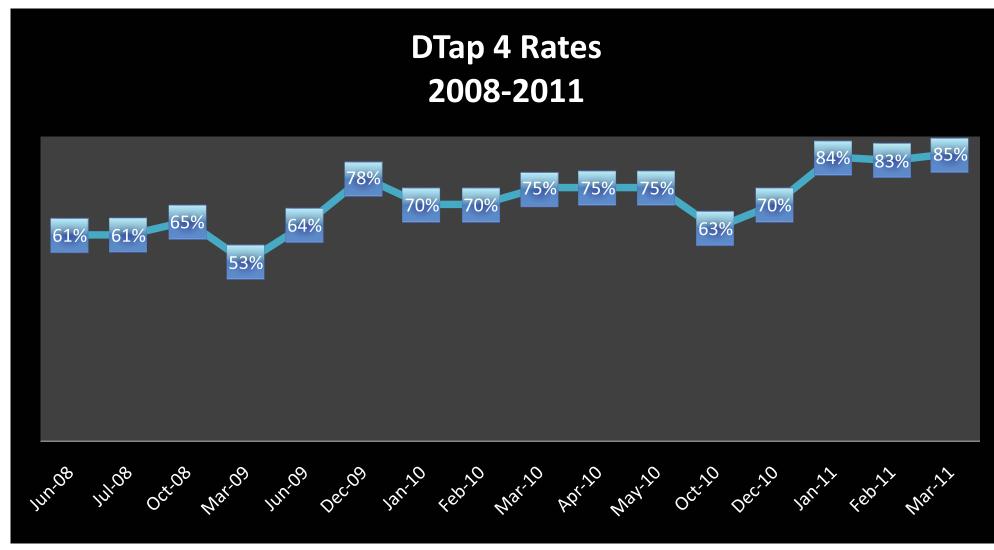


Figure 3: DTaP 4 Rates

Standardize the Improvements & Establish Future Plans

8. Standardize the Improvement or Develop New **Theory**

If healthcare providers are educated with up-to-date immunization information rates will increase to coincide with Healthy People 2010 goal of 90%.

9. Establish Future Plans

We plan to publish a quarterly Immunization Newsletter to educate/inform area healthcare providers on UTD immunization information.







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1. Getting Started

Three health departments that had all participated in QI-related activities in the past desired to know whether a collaborative would increase the efficacy of a QI project. After brainstorming common issues the team agreed to focus on increasing immunization rates.

2. Assemble the Team

The collaborative consists of contributors from three health departments with a coordinator housed at FCPH. Personnel from FCPH were selected to reflect the focus of the project. The team includes the Health Commissioner, Director of Nursing, Nurse Supervisor, Immunization Nurses, Immunization Clerk, and Project Coordinator. The Health Commissioner and Director of Nursing have offered leadership support for this project. The Nurse Supervisor and Immunization Nurses' daily roles have a direct application to the project's aim.

3. Examine the Current Approach

The collaborative used the "Model for Improvement" method. The team found the Process Map (*Figure 1*) to be the most useful tool for evaluating what the current methods and activities were. A Client Survey was also administered and data from Impact SIIS (state immunization registry) was analyzed through CoCASA. Anecdotal information from a senior staff member in regards to immunization rates indicated a low baseline rate for up-to-date 4th DTap.

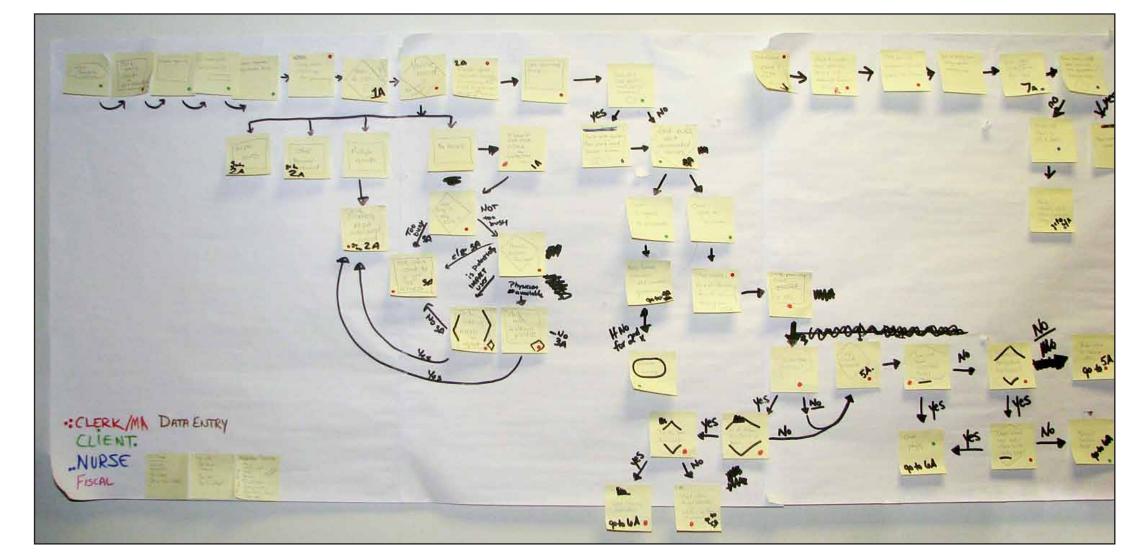


Figure 1: Process Map

4. Identify Potential Solutions

The team identified potential solutions from the Fishbone tool and the Client Survey. Staffing issues necessitated a suspension of the reminder/recall (R/R) process, but the team identified that the R/R process was integral to increasing immunization rates. Needing more time at the clinics and in the office was also an issue. This team did not complete a full PDSA cycle during this project, so more solutions may be found and studied as PDSA cycles are completed.

5. Develop an Improvement Theory

By streamlining clinic processes and improving the reminder/recall process, then the percentage of child clients up to date on the 4th DTaP will increase.

Test the Theory for Improvement

6. Test the Theory

Streamline clinic flow:

- Time study to get baseline information.
- Changed intake form to include preferred method of contact for reminder, including new methods of email or bypassing post mail.
- Added more clinic hours to the monthly schedule.

Improve R/R Process:

- Send home magnets (Figure 2) marked with return date and shots due on that date
- Identified that staff needs office time to conduct reminder/recall process



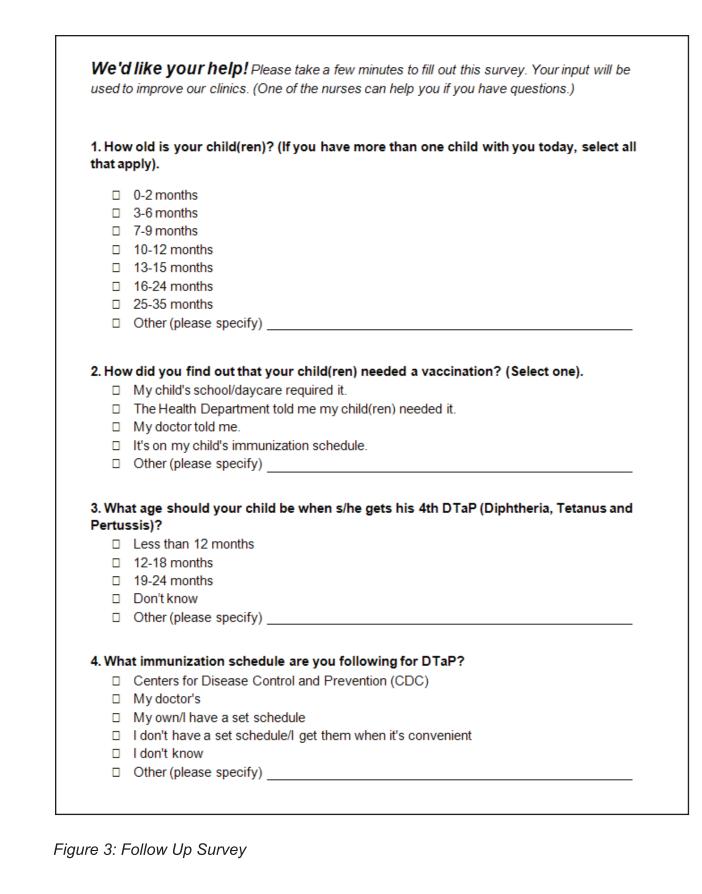


Use the Data to Study Results of the Test

7. Check the Results

The team is currently in the "DO" phase of the first cycle. However, tools are in place for checking results:

- Time study
- Follow Up Survey (Figure 3)
- Qualitative feedback re: reminder magnets
- Impact SIIS data through CoCASA
- Identified a gap in Impact SIIS data, so a "Clinic X" tool was created in Excel to analyze a sample of clients by hand.
- 'Reminder utilized' check box at sign-in



Standardize the Improvements & Establish Future Plans

8. Standardize the Improvement or Develop New Theory

The first order of actions is to complete the PDSA cycle. The team added a medical assistant in the clinics, freeing a nurse for office time. Part of the office time is used to start the full reminder/recall process including phone calls and mailings. Following through to MOGE will improve clinic data so that Impact and CoCASA are more reliable tools for reflecting the current immunization rates and drop off.

Clinic X evaluation (Table 1) for the magnet reminders showed a significant increase in up to date rates and a significant decrease in drop off. Therefore, the magnet reminder intervention is being continued in addition to the full reminder/recall process.

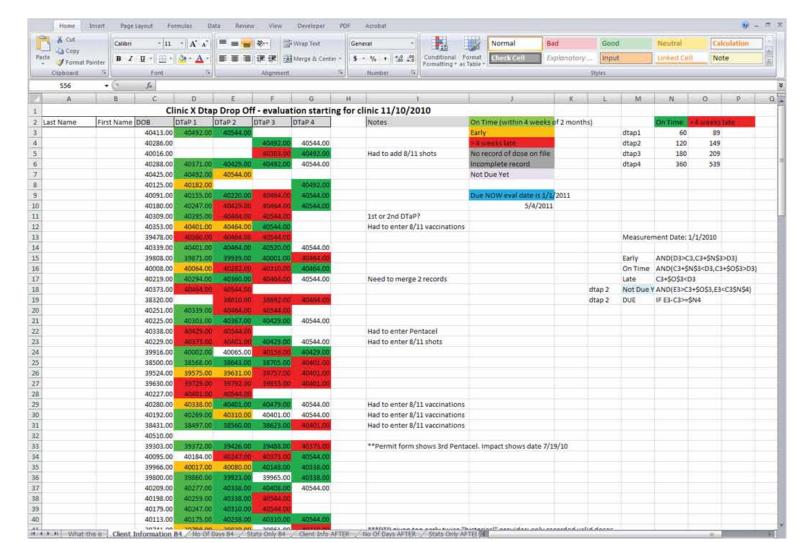


Table 1: Clinic X Spreadsheet

9. Establish Future Plans

The team plans to continue collecting data so that more PDSA cycles can be completed and more solutions applied to the AIM statement.

With the full reminder/recall process (*Figure 4*) occurring at the same time as magnet reminder, data is being collected from clients about which type of reminder is most effective.

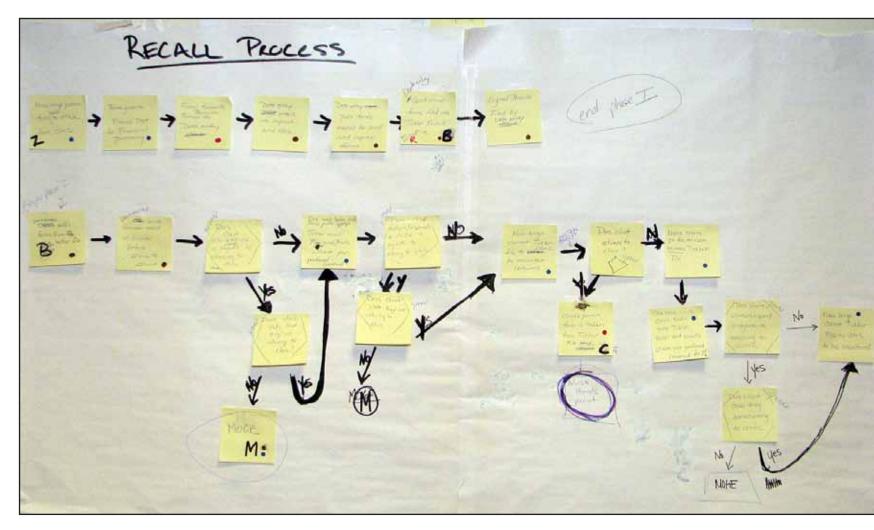


Figure 4: Reminder/Recall Process



Funding provided by the Robert Wood Johnson Foundation



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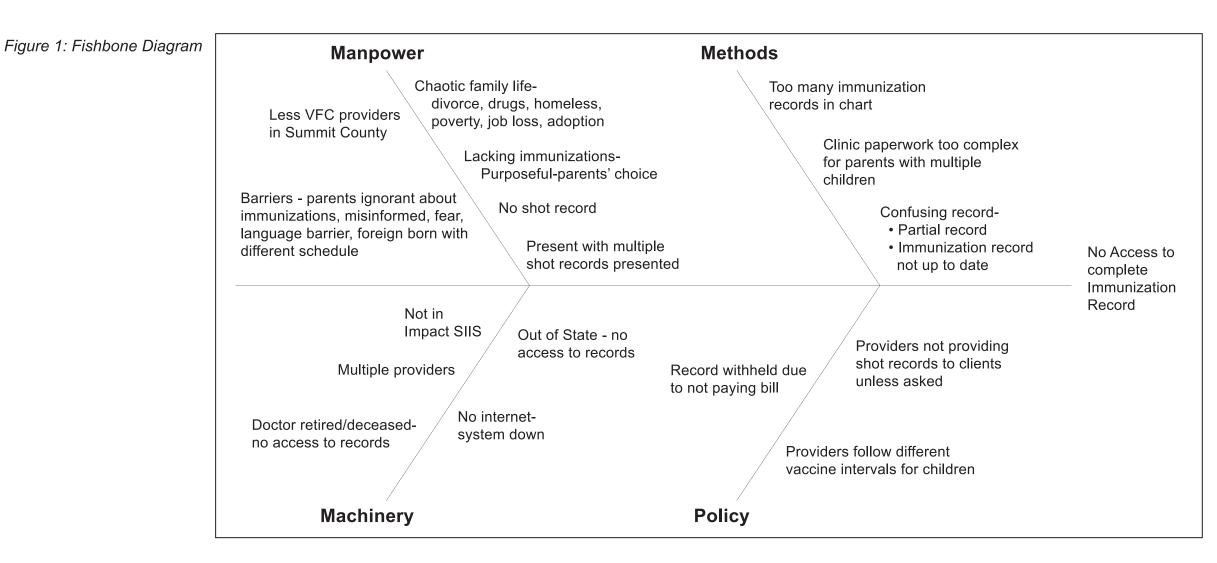
In collaboration with staff from Franklin County Public Health and Logan/ Hocking County Health Department, staff from Summit County Health District (SCHD) identified improving immunization rates for the 4th DTaP as an area for improvement. When the project was initiated in June of 2009, the up to date rate (UTD) in Summit County Health Department's Central and South clinics for DTaP 4 by 24 months was 80%, and the total UTD rate for 4:3:1:3:3:1 (4 DTaP,3 Polio,1 MMR,3 HIB,3 HepB,1 Varicella) was 78%. The SCHD QI team members embraced the effort to increase the immunization rate of DTaP 4 to 90%.

2. Assemble the Team

Five staff members (public health nurses and administrators) were identified to participate in the RWJF QI trainings. QI information and tools were then shared with all clinic staff members (support and nurses).

3. Examine the Current Approach

At weekly clinic meetings the clinic staff (nurses, supervisors and support staff) brainstormed the clinic flow process. A clinic flow sheet was constructed so that all involved could review the process from when a client presents to a clinic for immunizations to when they leave. Then the group used a cause and effect fishbone diagram (Figure 1) to identify root causes of a low UTD rate for DTaP #4. Multiple causes were identified that could have a negative affect on the immunization rates.



4. Identify Potential Solutions

As a result of the brainstorming several areas to intervene were discussed: providing immunization education for parents through improvement of SCHD website, working with physicians to follow CDC vaccination guidelines, making the state registry mandatory for physician offices and development of an inclusive immunization record to collect all immunization data.

5. Develop an Improvement Theory

The clinic staff came to a consensus that designing an inclusive improved SCHD immunization record would be the most advantageous intervention to implement. Clinic staff projected that the new immunization record would save review time as it would organize all the immunization data on one form, improve ease of data entry and ensure all parents left the clinic with a copy of the most current immunization record.

Test the Theory for Improvement

6. Test the Theory

Staff reviewed the current SCHD immunization record, ODH and other health district records and the Immunization Passport. Key elements were identified, a new record developed, and continuous improvements made utilizing staff input. In January 2010 a final version of a new immunization record was completed.

Use the Data to Study Results of the Test

7. Check the Results

After piloting the immunization record for children less than 24 months during the month of February 2010, a satisfaction survey was utilized for both staff and clients. Results showed the staff providing the immunizations felt creating the record for each client was labor intensive but that the record was easier to use; staff doing data entry felt the record was much clearer thus preventing potential data entry errors; and parents indicated they liked the record. In December 2010, the total UTD rate (4:3:1:3:3:1) increased to 83% but the UTD rate for the fourth DTaP dropped to 77% (Figure 2). Probable causes for the drop in DTaP UTD rates were multiple; including referrals from local family practice groups of clients who were "anti-vaccine", issues with chart location, with contacting parents, as well as some problems with data uploads to IMPACT SIIS.

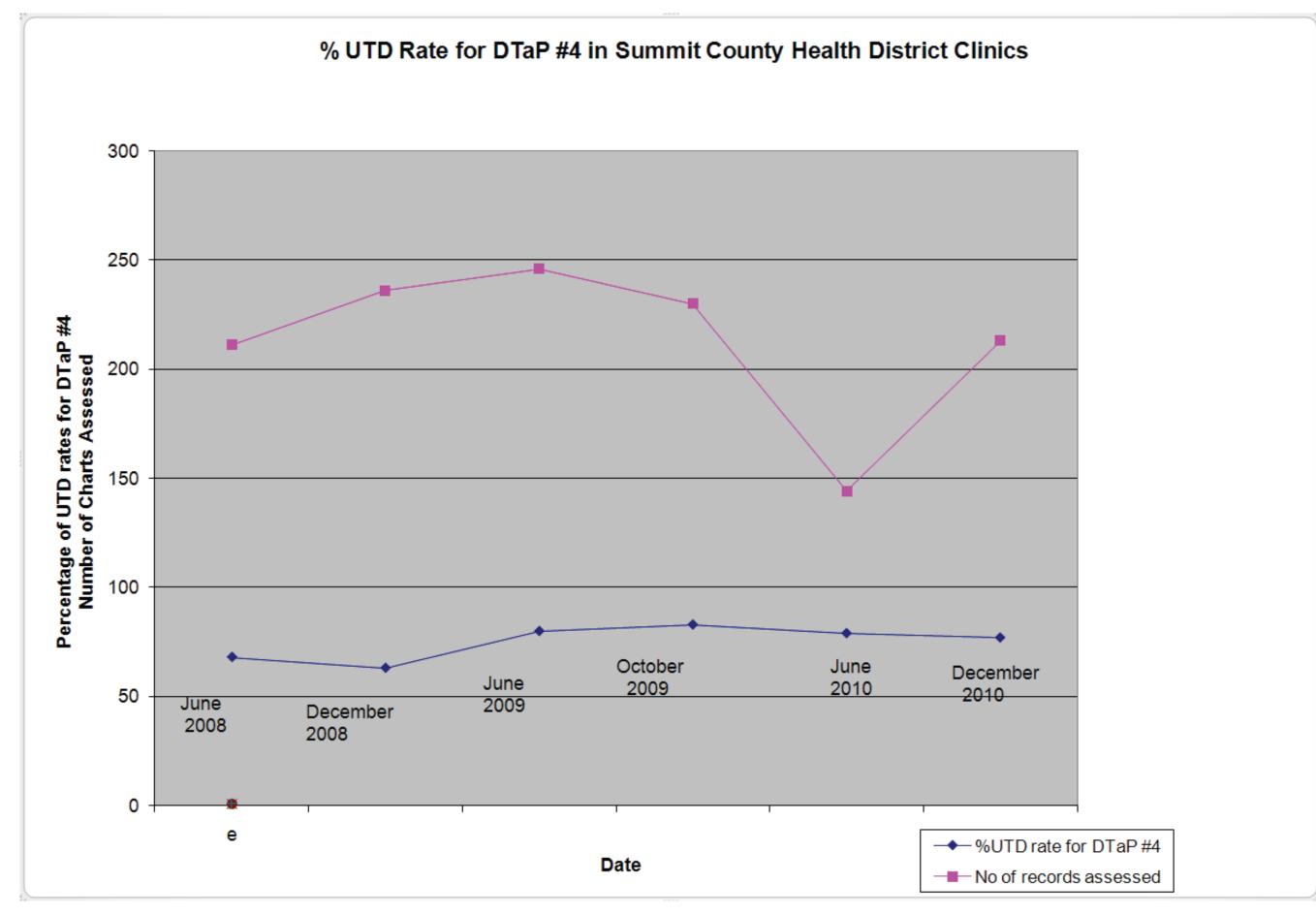


Figure 2: UTD Rates for Dtap #4 Chart

Standardize the Improvements & Establish Future Plans

8. Standardize the Improvement or Develop New Theory

The new record (Figure 3) was considered a success and incorporated into the clinic as standard document/practice.

Name	ovided with a copy of a	and have read the vacc	CHILD IMN	County Health District AUNIZATION RECO www.schd.org for the indicated vaccine(s	ORD Birth	Date	Department of Health a	
entered into the				· ·				
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Hep B VIS 7/18/07	Birth Pediarix/Comvax Lot # R -L Leg/Arm IM Mfg GSKMerck Sign Date		Pediarix/Comvax Lot # R -L Leg/Arm IM Mfg GSKMerck Sign Date	Pediari Lot # R -L Leg/A	6 months Pediarix/Comvax Lot # R -L Leg/Arm IM Mfg GSKMerck Sign		Pediarix/Comvax Lot # R -L Leg/Arm IM Mfg GSKMerck Sign Date	
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PCV/PPV Prevnar VIS 4/16/10	2 months R-L Leg/Arm IM Lot # Mfg Wyeth Sign Date		A months R-L Leg/Arm IM Lot # Mfg Wyeth Sign Date	R-L Leg/A	Mfg Wyeth Sign		R-L Leg/Arm IM Lot # Mfg Wyeth Sign Date	
Rotavirus VIS 5/14/10	RotaTeq/Rotari ORAL Lot # Mfg GSKMerck Sign Date	2 months	ORAL Lot # Mfg GSK Sign	Lot # Mfg GSKMerck		6 months RotaTeq/Rotarix ORAL Lot # Mfg GSKMerck Sign Date		

Figure 3: New Child Immunization Record

9. Establish Future Plans

Several additional areas were recognized as needed areas of improvement and the QI process was successfully utilized to address the problems:

- Recognition that people forgot their scheduled appointments and the clinic experienced a substantial "No Show" rate.
- Identification that increased reminder/ recall efforts affected the ability to accommodate walk in clients.



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