

# Public Health Performance Management Centers for Excellence

QUALITY IMPROVEMENT STORY BOARD 9/27/12



**WHATCOM COUNTY HEALTH DEPARTMENT**  
 509 GIRARD STREET, BELLINGHAM, WA, 98266  
 (360) 676-6724  
 75 EMPLOYEES, SERVING A  
 POPULATION OF 201,140

<b>QI Team:</b>	Alice Clayton, CD & Epi PHN
	Alice Simmons, Immunization Program Supervisor
	Ben Scholtz, Public Health Advisory Board Member
	Connie Kelley, Immunization Program PHN
	German Gonzalez, MD & CD & EPI Division Manager
	Sandy Abernathy, Immunization Program PHN
	Susan Sloan, Performance Management Specialist
	Terry Hinz, Assistant Director

**QI PROJECT:** *IMPROVING IMMUNIZATION PROGRAM  
 VFC & AFIX SITE VISIT EFFICIENCY*

**Definitions:** **VFC** – **V**accine **F**or **C**hildren Program provides public purchased vaccine to health care providers who serve children less than 18 years. **AFIX**- A quality improvement strategy to raise immunization coverage levels and improve standards of practice at the provider level. It includes **A**ssessment of immunization coverage levels, **F**eedback of diagnostic information to improve service delivery, **I**ncentives to recognize and reward improved performance, **eX**change of information among providers.

**PLAN**  
 Identify an opportunity and Plan for Improvement

**1. Getting Started**

The quality improvement project WCHD chose was intended to increase efficiencies in our Immunization Program while improving our readiness for accreditation by enhancing staff skills in implementing a QI effort.

**2. Assemble the Team**

Our diverse team included the CD & Epi Division, administrative staff and a local Public Health Advisory Board member. The team met regularly through May 2012 and was supported by a Centers for Excellence QI coach, Scott Davis.

**3. Examine the Current Approach**

Based on data from a 2011 Immunization Program evaluation, the team began with the goal of increasing two-year-old "up-to-date" immunization rates to 80 percent. Difficulties in implementing the project led the team to arrive at a more realistic project goal.

**AIM STATEMENT:**  
 Reduce the number of steps required to enter, retrieve and compliance and AFIX Site Visit data by at least 30% by July 2, 2012.



required to complete VFC and AFIX visits. This review identified redundant

and inefficient steps in the site visit process.

**4. Identify Potential Solutions**

The following potential changes were identified:

- ☐ Adopt the use of laptops during VFC and AFIX visits to create an electronic system for onsite reporting to providers and DOH.
- ☐ Complete provider "Summary Reports" in the field rather than back at the office.
- ☐ Eliminate the need for printing, copying and mailing reports to providers and DOH

**5. Develop an Improvement Theory**

*If WCHD reduces the time it takes staff to report VFC and AFIX visit findings, then additional staff time will be available to focus on provider education to increase two-year-old immunization rates and contribute to longer-term goals.*

**DO**  
 Test the Theory for Improvement

**6. Test the Theory**

The team reviewed in detail the VFC process flow and measured the number of steps in the process and the time

Pre and post VFC & AFIX visit times were calculated for each Public Health Nurse.

**STUDY**  
 Use Data to Study Results of the Test

**7. Study the Results**

For VFC visits, the average visit time was reduced from 7.25 to 6.71 hours for a savings of .54 hours. Also, a gain of .67 hours of staff time was achieved because printing, copying and mailing of VFC reports were eliminated.

**Cost savings per visit = \$79.16**  
**Time savings per visit = 1.21**

**ACT**  
 Standardize the Improvement and Establish Future Plans

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

Using field computers during provider VFC visits provides modest cost and time savings in reporting findings to providers and DOH. The team will be sharing these results with other WA Immunization Programs.

**9. Establish Future Plans**

- ✓ Complete post-times for AFIX visits and calculate savings.

## *Public Health Performance Management Centers for Excellence*

- ✓ Create a standing QI agenda item for Immunization meetings.
- ✓ Establish a program QI budget.
- ✓ Implement additional solutions identified during this project—eliminate the use of paper & pencil charts, for example.



Whatcom County Health Department  
 Immunization QI Project  
**Brainstorm and Nominal Group Process**

The team used the following criteria to assist in the prioritization discussion:

1. Good chance for success
2. What we do will make a difference (not just an exercise)
3. Manageable and doable (in terms of time and resources)
4. A meaningful goal for the team, Department, and community

Potential Project Direction	Pros	Cons
A. Decrease lead time between initial call and a scheduled appointment (days/weeks) (n=4) <sup>1</sup>	<ul style="list-style-type: none"> <li>• Meets all 4 criteria</li> <li>• A doable “chunk”</li> <li>• Would also potentially decrease “no shows” because people can get in when they actually need an appointment</li> </ul>	<ul style="list-style-type: none"> <li>• Requires change that may be uncomfortable</li> <li>• May require stress on staff (Tracey suggested that BTC students might be available to help)</li> <li>• This is a BIG “chunk” (Scott)</li> <li>• System level analysis (Scott)</li> </ul>
B. Decrease the number of appointment “no shows” (n=1)	<ul style="list-style-type: none"> <li>• Would result in more people vaccinated</li> <li>• Could make a big difference for some</li> <li>• More efficient use of staff time</li> </ul>	<ul style="list-style-type: none"> <li>• Many factors that are out of our control (ex: weather)</li> <li>• Success may be limited</li> </ul>
C. Increase the number of immunizations provided per hour (n=0)	<ul style="list-style-type: none"> <li>• Potential to streamline clinic processes</li> <li>• LEAN</li> </ul>	<ul style="list-style-type: none"> <li>• It is difficult to stay on schedule</li> <li>• Changes may impact quality of care</li> </ul>
Potential Project Direction	Pros	Cons
D. Increase 2-year-old pertussis immunizations (n=0)	No “pros” mentioned	<ul style="list-style-type: none"> <li>• Too broad, not manageable</li> </ul>
E. Increase TDAP immunizations (n=2)	<ul style="list-style-type: none"> <li>• Very worthwhile for impact on pertussis</li> <li>• Dovetails nicely with current project of available TDAP</li> <li>• Current increase in pertussis cases (vaccine provides quick turnaround)</li> <li>• Could improve system-level collaboration</li> </ul>	<ul style="list-style-type: none"> <li>• Vaccine may be limited to doses on hand</li> <li>• Not typical QI project in terms of application</li> </ul>
F. Increase immunization rates within one specific provider practice (for 2-year-olds and their guardians) (n=3)	<ul style="list-style-type: none"> <li>• Potential to fit well with AFIX work</li> <li>• Good chance of success</li> <li>• Project of interest to Family Care Network</li> <li>• Potential to raise knowledge of staff/patients by developing consistent standards</li> <li>• Potential for wider application</li> </ul>	<ul style="list-style-type: none"> <li>• Provider practices have multiple projects, may be seen as “just another mandate”</li> <li>• Provider practice would need additional support to participate</li> <li>• Perhaps not manageable or doable (but meets the other 3 criteria)</li> <li>• Changing provider environment (potential for practice mergers)</li> </ul>

<sup>1</sup> Bracketed numbers are initial votes from 1/17. Each of 5 persons had 2 votes each.



Whatcom County Health Department  
 Immunization QI Project  
**Brainstorm and Nominal Group Process**

Following this exercise, each team member rank-ordered the six choices with the top choice getting 6 points, second choice getting 5 points, etc. through last choice at 1 point. The results were tabulated and then rank-ordered from highest to lowest score:

CHOICE	Score: 6	Score: 5	Score: 4	Score: 3	Score: 2	Score: 1	TOTAL
<b>F</b>	2 X 6 = 12	2 X 5 = 10	1 X 4 = 4	1 X 3 = 3			<b>29</b>
<b>B</b>	1 X 6 = 6	2 X 5 = 10	1 X 4 = 4	2 X 3 = 6			<b>26</b>
<b>A</b>	3 X 6 = 18	1 X 5 = 5			1 X 2 = 2	1 X 1 = 1	<b>26</b>
<b>C</b>		1 X 5 = 5	2 X 4 = 8		3 X 2 = 6		<b>19</b>
<b>E</b>			2 X 4 = 8	2 X 3 = 6	1 X 2 = 2	1 X 1 = 1	<b>17</b>
<b>D</b>				1 X 3 = 3	1 X 2 = 2	4 X 1 = 4	<b>9</b>

The team then had an in depth discussion centering on the top three choices (F, B, and A). The discussion largely confirmed that the “pros” for increasing immunization rates within on specific provider practice were strong factors in the high score F received. A show of hands was then taken and the group chose F by consensus.