**Plan**

1. **Team:** Key staff in QI and Immunizations comprised the team.

2. **Identify the Problem**
   The Oregon State Immunization Program Triennial Review in May 2010 found that DCHS immunization data entry did not meet the necessary benchmark of 80% of data being entered into the State IRIS/ALERT database within 14 days of vaccine administration. Addressing this issue would satisfy measure 9.2.2B: two examples of implementing quality improvement.

**AIM Statement:** 95% of all immunization administration data from all Deschutes County Public Health clinics will be entered into IRIS/ALERT within 14 days of administration.

3. **Examine the Current Approach**
   **Current Immunization Workflow:**

   - Client Completes Vaccine Administration Record
   - VAR Demographics Input into OCHIN by MOA
   - VAR to Nurse to Administer Vaccine & Document on Form
   - VAR Back to MOA to enter vaccine charges into OCHIN
   - VAR and encounter forms to Billing. Billing separates non-immunization forms from those with VARS and then drops in Jan’s Immunization Basket
   - VAR and encounter forms to Janel for data entry into IRIS/ALERT
   - VAR and encounter form to Angela to reconcile payment/reports
   - Courier Contents to Medical Records to distribute

   **Baseline Data Entry Jan 08 – Oct 2010**
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<tbody>
<tr>
<td>Clinic Lapine</td>
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   **Root Cause Analysis**
   - The red indicates identified root causes

4. **Identify Potential Solutions**
   Potential solutions included adding an additional staff member to conduct data entry, develop a consistent courier schedule, and eliminate unnecessary rework and quality checking that result in interruptions of data entry.

5. **Develop an Improvement Theory**
   If a regular courier schedule can be established, additional staff can assist with data entry, and immunization paperwork is checked for accuracy, then immunization data entry timeliness will be improved across clinics.

**DO**

In response to our improvement theory, four interventions were conducted and data were collected following a one month period.

6. **Test the Theory**
   The following improvements were implemented over a one month period in response to the improvement theory:
   - Developed and implemented a regular courier schedule.
   - Allocated an additional staff member to be trained to complete data entry for the Bend Clinic.
   - Trained Front Office staff to check immunization paperwork for completeness at the time of service to eliminate re-work later.
   - Re-trained clinicians to accurately complete paperwork and now hold them accountable for errors.

**Check**

7. **Check the Results**
   The results from the first data collection, 11/30/2010, are as follows:

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<tr>
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<tr>
<td>SBHC Lynch</td>
<td>38%</td>
<td>21%</td>
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</tbody>
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On average, across all clinics, there was a 31% increase in data entry timeliness. Given the above results, it was determined that the interventions resulted in improvements at the majority of clinics. It is anticipated that a higher increase in data entry timeliness will be achieved by the next data collection of 12/31/10.

**Act**

8. **Standardize the Improvement or Develop New Theory**
   The test has been adapted by extending the study time. If additional improvements are achieved the improvement will be standardized.

9. **Establish Future Plans**
   Data will be collected until July 1, 2011 at which time the full effectiveness of the changes will be analyzed. Subsequently, data entry rates will be monitored on a six month basis to ensure the maintenance of the improvements.