TRACKING STATE FUNDED INFLUENZA VACCINE

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PLAN: IDENTIFY AN OPPORTUNITY AND PLAN FOR IMPROVEMENT

1. Getting Started: Make a plan to help improve reporting of flu vaccine usage.

2. Assemble the Team: Public Health Nurses, Evaluation Team, and SDIR

3. Examine the Current Approach:
   - Describe how things are working now
   - Look at personnel and tools available

4. Identify Potential Solutions

5. Develop an Improvement Theory
WHERE DID WE START?

The Memorandum of Agreement (the MOA) was reworked, the signee identified, and new language added.

Flu Database and SDIR (registry) enhancements

“Um, Can you repeat the part of the stuff where you said all about the things?”

“I agreed to guide you. My contract says nothing about pulling a sleigh.”
MEMORANDUM OF AGREEMENT (MOA)

• Outlined Provider’s responsibilities in accordance with SDIP and CDPH standards.

• Required all Providers to attend a State Funded Influenza Requirements training detailing the process of the new State Funded flu reporting.

• Providers agreed to submit a weekly report of their reconciled State Funded influenza usage, doses wasted, and/or doses transferred to other sites.
STATE FLU PROCESS AND TASKS

Distribution

- Update list of providers & contacts
- Flu Vaccine Allocation - internal & external
- Flu Allocation in Flu Database

Pick Up Flow

- Warehouse/Vaccine preparation
- Scheduling pick up
- Pick up forms, vaccine, & warehouse confirmation

Accountability

- Weekly flu reporting/data entry
- NON-SDIR/SDIR inventory & reports reconciliation
- EHR/manual inventory reconciliation
Who Are Our 114 State Funded Influenza Providers?

- Public Health Centers (including 18 flu pods)
- Community Health Clinics
- Community Based Organizations
- County of San Diego Programs
The requirements training:
- reviewed the mandatory weekly state funded flu usage form.
- demonstrated changes to SDIR 'Demographics' & 'Immunization' tabs, vaccine inventory, & SDIR reports.
- encouraged/promoted Non-SDIR providers to join SDIR.

Storage and Handling-Clinical Services, in collaboration with VFC provided training on:
- proper administration of flu vaccine
- required documentation
- transporting vaccine
- storage/handling of flu vaccine.
STATE FUNDED FLU MATERIALS FOR PROVIDERS
Providers using SDIR were given guides with instructions on how to enter vaccine inventory data correctly.

A guide with the State Funded flu lot numbers helped differentiate State Funded flu from VFC flu lots.
Screen shots of how flu vaccine is entered as inventory into SDIR.
Internet Explorer - Logoff Warning

You have been on-line for 1 year.
Do you wish to Log Off and get a Life?

- Yes
- No

- Remind me next year
Changes Made to the SDIR Demographic Tab

The first change was making the vaccine source a required field in the ‘Demographics’ tab.

**IMPORTANT:** Before a vaccine can be selected from the “Add IZ from Inventory” link in the ‘Immunization’ tab, a User must first select the patient’s vaccine source (VFC, Private, State General Fund, or 317) from the ‘Vaccine Eligibility’ field.
When a User selects the vaccine source (VFC, Private, 317, or General State Fund) under the ‘Vaccine Eligibility’ field in the ‘Demographics’ tab, the yellow ‘Immunization’ tab will populate only those vaccines in ‘Add IZ from Inventory’ link. If they do not choose the Vaccine Eligibility of the patient, they will receive a warning.
### Changes to SDIR Reports: The Daily Immunization & Vaccine Usage Reports

- The Daily IZ report was enhanced to include the total doses by vaccine source.
- The total is compared with the Vaccine Usage report.

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Patients</td>
<td>580</td>
</tr>
<tr>
<td>Total Immunizations</td>
<td>1676</td>
</tr>
<tr>
<td>Total VFC</td>
<td>1050</td>
</tr>
<tr>
<td>Total PVT</td>
<td>153</td>
</tr>
<tr>
<td>Total 317</td>
<td>0</td>
</tr>
<tr>
<td>Total ST</td>
<td>426</td>
</tr>
<tr>
<td>Total Unknown</td>
<td>47</td>
</tr>
</tbody>
</table>
### Vaccine Usage Report

**Source Name:** Discovery Health Center  
**Facility Name:** Discovery Health Center - A  
**Run By:** Nancy  
**Date Run:** 04/07/2015

**Report Facility:** Discovery Health Center - A

<table>
<thead>
<tr>
<th>Vaccine Name</th>
<th>Dose</th>
<th>6-35 mo</th>
<th>Age 3-6 yr</th>
<th>Age 7-18 yr</th>
<th>Age 19-49 yr</th>
<th>Age 50-64 yr</th>
<th>Age 65+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza live (LAIV4-intranasal) quad</td>
<td></td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Influenza, (IIV3-inj) &gt;=3y</td>
<td></td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Sub Total</strong></td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>*** Grand Total</td>
<td></td>
<td>11</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Patient Count</td>
<td></td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>

- Providers using SDIR are able to produce a flu report matching their state flu usage by vaccine type (IIV3, IIV4, LAIV) and totals by age range.
I DON'T ALWAYS CLEAR MY CALCULATOR

BUT WHEN I DO, I HIT BOTH 'C' AND 'CE' A BUNCH OF TIMES BECAUSE I DON'T KNOW EXACTLY WHAT THEY DO
The top section of the main screen (not seen here) contains the organization, site, and contact information.

The section below is the record of the site’s weekly usage, broken down by age range, doses unknown, doses wasted, doses on hand. If the Provider is using SDIR, the SDIR count is entered.

<table>
<thead>
<tr>
<th>Date</th>
<th>FluLevel</th>
<th>5NEMM</th>
<th>DOSE 100</th>
<th>DOSE 200</th>
<th>DOSE 400</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/27/2014</td>
<td>20</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/28/2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/24/2014</td>
<td>4</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 03/24: Wendy verified with Nancy that the 8 doses were not used.
- 03/17: 15: Went over flu form and the pct.
- 03/15: Nancy verified with clinic it’s FluLAV.
- Reporting flu on form but it is fluave.
- 03/15: Received amended report from S.
## FLU INVENTORY TRACKED BY FLU DATABASE

### FLU INVENTORY
**Fiscal Year 2014 - 2015**

<table>
<thead>
<tr>
<th>Vaccine Name</th>
<th>Vaccine Mfg</th>
<th>Dose/ Pkg</th>
<th>Volume</th>
<th>Lot</th>
<th>Expiration</th>
<th>Source</th>
<th>Original Inventory</th>
<th>Vaccines Distributed</th>
<th>Vaccine On Hand</th>
<th>Inventory based on orders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Plq</td>
<td>Plq</td>
<td>Plq</td>
<td>Plq</td>
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<td>Dose</td>
<td>Dose</td>
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<td></td>
<td>Dose</td>
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<td>Dose</td>
<td>Dose</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dose</td>
<td>Dose</td>
<td>Dose</td>
<td>Dose</td>
</tr>
</tbody>
</table>

### Flu Level

| GSK          | 10          | 5 mL      | 3444   | 5/31/2015 | STATE | 357 | 3570 | 10 | 100 | 10 | 100 |
| GSK          | 10          | 5 mL      | 3532   | 6/30/2015 | STATE | 1417 | 14170 | 23.900 | 239.00 | 23.900 | 239.00 |
| GSK          | 10          | 5 mL      | 5533   | 6/30/2015 | STATE | 606  | 6060 | 27 | 270 | 5 | 50 |

**Totals**

|                | 2380 | 23800 | 2319.1 | 23191 | 60.900 | 609.00 | 38.900 | 389.00 |

### FluMist

| MedImmune     | 10  | 0.2 mL | CH2061 | 12/8/2014 | STATE | 30  | 500  | 50.4 | 504 | -0.4 | -4 |
| MedImmune     | 10  | 0.2 mL | CJ2003 | 12/15/2014| STATE | 86  | 860  | 77.3 | 773 | 8.7000 | 87.00 |
| MedImmune     | 10  | 0.2 mL | CJ2126 | 12/29/2014| STATE | 81  | 810  | 40.3 | 403 | 40.7 | 407 |
| MedImmune     | 10  | 0.2 mL | CK2137 | 2/9/2015   | STATE | 4   | 40   | 4   | 40  | 0   | 0   |
| MedImmune     | 10  | 0.2 mL | CL2127 | 5/4/2015   | STATE | 41  | 410  | 28  | 280 | 13  | 130 |

**Totals**

|                | 282  | 2620  | 200 | 2000 | 62   | 620   | 62   | 620   |

### Fluvirin PF

| Novartis      | 10  | 0.5 mL | 145003 | 3/30/2015 | STATE | 30  | 300  | 30  | 300 | 0   | 0   |
| Novartis      | 10  | 0.5 mL | 145004 | 3/31/2015 | STATE | 860 | 8600 | 850.8 | 8508 | 9.2000 | 92.00 |

**Totals**

|                | 890  | 8900  | 880.8 | 8808  | 9.2000 | 92.000 |

### Flu Shot

| Sanofi Pasteur| 10  | 5 mL   | UI189AB | 6/30/2015 | STATE | 1257 | 12970 | 1309.6 | 13096 | -52.6 | -526 |
| Sanofi Pasteur| 10  | 5 mL   | UI1894D | 6/30/2015 | STATE | 1345 | 13450 | 1321.5 | 13215 | 23.5  | 235  |
| Sanofi Pasteur| 10  | 5 mL   | UI189AC | 6/30/2015 | STATE | 192  | 1920  | 0    | 0    | 0    | 0    |

**Totals**

|                | 2794 | 27940 | 2823.1 | 28231 | -29.1 | -291 |

### Flu Shot Pediatric

| Sanofi Pasteur | 10  | 0.25 mL | U5007AB | 6/30/2015 | STATE | 130  | 1500  | 29  | 290 | 10  | 10 |
| Sanofi Pasteur | 10  | 0.25 mL | UH990CA | 6/30/2015 | STATE | 30   | 300   | 25.5 | 255 | 25.5 | 255 |

**Totals**

|                | 180  | 1800  | 133.5  | 1335  | 26.5  | 265 |

### Flu Shot PF

| Sanofi Pasteur | 10  | 0.5 mL   | UI207AA | 6/30/2015 | STATE | 11   | 110   | 11  | 110 | 0    | 0    |
| Sanofi Pasteur | 10  | 0.5 mL   | UI207AA | 6/30/2015 | STATE | 11   | 110   | 11  | 110 | 0    | 0    |

**Totals**

|                | 6517 | 65170 | 6387.5 | 63875 | 129.5 | 1295 |

**GRAND TOTAL**
Receive the vaccine usage and inventory form via fax or email weekly.

Enter the reported usage and current inventory data into the database by site.

Is the reported inventory matched with the current SDIR inventory?

- Yes: Pass!
- No: Contact provider for verification.

Is the current inventory matched with the inventory from previous week minus used doses this week?

- Yes: Pass!
- No: Contact provider for verification.
Weekly Process of Quality Assurance Facility Without SDIR Inventory Feature

Receive the vaccine usage and inventory form via fax or email weekly

Enter the reported usage and current inventory data into the database by site

Is the current inventory matched with the inventory from previous week minus used doses this week?

- **YES**
  - Pass

- **No**
  - Contact provider for verification
INFLUENZA VACCINES DISTRIBUTED 2014-2015

<table>
<thead>
<tr>
<th>Category</th>
<th># of Vaccines Distributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Diego Black Nurses</td>
<td>1,060</td>
</tr>
<tr>
<td>Hospital Based Community benefit program</td>
<td>3,730</td>
</tr>
<tr>
<td>San Diego Medical Society</td>
<td>500</td>
</tr>
<tr>
<td>Community Clinics</td>
<td>42,356</td>
</tr>
<tr>
<td>Public Health Centers</td>
<td>7,566</td>
</tr>
<tr>
<td>PODs</td>
<td>3,815</td>
</tr>
<tr>
<td>Other</td>
<td>4,680</td>
</tr>
<tr>
<td><strong>Total Distributed</strong></td>
<td><strong>63,707</strong></td>
</tr>
</tbody>
</table>
TOP 12 REASONS FOR INACCURATE REPORTING

• Multiple flu products with different expiration dates
• Unpredictable usage based on demand and publicity around “match”
• SDIR inventory drop-down list confusing
• Providers order based on previous history vs. actual usage
• Frequency of reporting not sufficient to catch errors early
• Inaccurate and/or late reporting from providers
• Insufficient communication and training to providers
• Providers not using SDIR correctly
• Providers redistributing vaccine within the organization
• Confusion about maintaining separate inventories based on funding
• Provider staff turnover
• Insufficient County staff resources assigned to managing flu
CONCLUSIONS

ESTABLISH FUTURE PLANS

- Assign staff roles early in the process
- Clarify discrepancies in usage logs immediately
- Review usage from 2014-15 to determine order for 2015-16
- Require appropriate staff to attend training prior to receiving vaccine
- Provide information packets to each site that include:
  - Flu vaccine information
  - MOA
  - Storage and handling requirements, especially for transporting
  - Instructions for completing the weekly usage report
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