Overview

USIIS includes new reports in the Clinic History and Batch Processes module. These reports are called AFIX reports. AFIX is an abbreviation for Assessment, Feedback, Incentives, and eXchange—developed by the CDC as a quality improvement tool to increase vaccination of children and adolescents with ACIP (Advisory Committee on Immunization Practices) recommended vaccines.

The purpose of these assessment reports is to assist healthcare providers in assessing their childhood and adolescent immunization coverage rates and in improving immunization delivery practices.

The Utah Department of Health Immunization Program will use these reports for AFIX visits with VFC Providers. However, VFC and non-VFC providers are encouraged to use these reports to assess immunization practices.

Accessing AFIX Reports

AFIX Reports are available in USIIS Clinic Reports and Batch Processes. There are two ways to access this module: 1) from the USIIS Portal when a user first logs into USIIS, and 2) by selecting Clinic Reports & Batch Processes from the Change USIIS Service pick-list on any USIIS screen.
After selecting **Clinic Reports & Batch Processes**, the following **Reports** screen displays showing all reports created by facility users, not previously deleted. In the sample below, there are no reports displayed.

![Image of Clinic Reports and Batch Processes](image)

### Create New Report

The following Clinic reports are available—including the two new AFIX reports:

<table>
<thead>
<tr>
<th>Report name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AFIX Adolescent Coverage Report</strong></td>
<td>Clinic patients age 13-17 years. Three reports:</td>
</tr>
<tr>
<td><em>(New report)</em></td>
<td>• Vaccine coverage rates – aggregated across patients</td>
</tr>
<tr>
<td></td>
<td>• Invalid vaccinations – by patient</td>
</tr>
<tr>
<td></td>
<td>• Missed vaccination opportunities – by patient</td>
</tr>
<tr>
<td><strong>AFIX Childhood Coverage Report</strong></td>
<td>Clinic patients age 24-35 months. Three reports:</td>
</tr>
<tr>
<td><em>(New report)</em></td>
<td>• Vaccine coverage rates – aggregated across patients</td>
</tr>
<tr>
<td></td>
<td>• Invalid vaccinations – by patient</td>
</tr>
<tr>
<td></td>
<td>• Missed vaccination opportunities – by patient</td>
</tr>
<tr>
<td><strong>Batch Forecast Report by Patient ID</strong></td>
<td>Clinic patients (Patient IDs) specified by user.</td>
</tr>
<tr>
<td></td>
<td>• Report: Recommended vaccinations for specific patients.</td>
</tr>
<tr>
<td></td>
<td>• Useful for preparing immunization forecasts for patients with appointments</td>
</tr>
<tr>
<td></td>
<td>the following day.</td>
</tr>
<tr>
<td><strong>Batch List Reports</strong></td>
<td>Reports and Actions that can be run for previously created clinic patient</td>
</tr>
<tr>
<td></td>
<td>lists (Batch Lists).</td>
</tr>
<tr>
<td></td>
<td>• Reports include: 1) Reminder Recall, and 2) Batch Forecast.</td>
</tr>
<tr>
<td></td>
<td>• Actions include: 1) Modify List, 2) Delete List, and 3) End Clinic</td>
</tr>
<tr>
<td></td>
<td>Affiliation.</td>
</tr>
<tr>
<td><strong>Clinic History Report</strong></td>
<td>Vaccination date range specified by user.</td>
</tr>
<tr>
<td></td>
<td>• Report: Vaccinations administered at clinic. User can specify sorting by</td>
</tr>
<tr>
<td></td>
<td>vaccination date, vaccine type or patient name.</td>
</tr>
</tbody>
</table>
Create an AFIX Adolescent Coverage Report

Select AFIX Adolescent Coverage Report from the Create New Report pick-list.

Note below

- AFIX Adolescent Coverage Report displays in the Reports list.
- Status is “Running.”
- Status will change to “Ready” when the report is completed. This could take some time for large volume clinics. The user may do other work and return at another time to retrieve the report.
- Press the Update Status button to get an updated % completed in the previous column.

When report creation is complete, the screen updates as follows.
Note above

- Status is “Ready.” This means the report may be retrieved – to be printed or saved.
- Retrieve button – when pressed will display the AFIX Adolescent Coverage Report. See a sample report in a section later in this document.

! Important Note:
- You may retrieve an AFIX report for 30 days. Remember to print or save it on your computer if you need to refer to it for longer than 30 days.
- All other Reports may only be retrieved only once. Remember to print or save these reports on your computer.

- Invalid Imms button – when pressed will display a report of patients (within the adolescent cohort) who received invalid vaccinations. See a sample report in a section later in this document.

- Missed Opps button – when pressed will display a report of vaccinations that patients (within the adolescent cohort) should have been administered at their last vaccination visit, but were not. See a sample report in a section later in this document.

- Delete button – when pressed will permanently remove the report from the Reports list.

Tip: When a report is no longer retrievable but has not yet been deleted, clicking on the Report Name will display the criteria that was used to create the report. This may be useful to recreate a report that wasn’t printed or saved.

Create an AFIX Childhood Coverage Report

- Select AFIX Childhood Coverage Report from the Create New Report pick-list.
- A new report displays in the reports list—see below screen.
- Status will display “Running” until it is “Ready”
- When the report is “Ready”, the same buttons become available as described above—Retrieve, Invalid Imms, Missed Opps and Delete.

Reports

Create New Report: Choose One

Filter by: user who requested the report: Nam Test, report type: All Report Types, batch list: All Batch Lists

<table>
<thead>
<tr>
<th>ID</th>
<th>Report Name</th>
<th>Status</th>
<th>User</th>
<th>Report Time</th>
<th>Records Included</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>400090</td>
<td>AFIX Childhood Coverage Report</td>
<td>Ready</td>
<td>Nam Test</td>
<td>02/13/2010 02:07:59 PM</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>400557</td>
<td>AFIX Adolescent Coverage Report</td>
<td>Ready</td>
<td>Nam Test</td>
<td>02/15/2010 01:54:31 PM</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

Retrieve, Invalid Imms, Missed Opps, Delete
**AFIX Coverage Reports Explained**

**Patient Assessment Cohorts**

1. Childhood cohort: 24-35 months of age—i.e., have celebrated their 2nd birthday but have not yet turned 3 years.
   a. Birth date range is calculated based on the date the assessment report is run.
   b. Start date of the birth cohort range is 36 months plus one day prior to the assessment (report) date.
   c. End date of the birth cohort range is 24 months prior to the assessment (report) date.
   d. Example:
      - Assessment (report) date = 12/31/2018
      - Start date = 1/1/2016
      - End date = 12/31/2016

2. Adolescent cohort: 13-17 years of age—i.e., have celebrated their 13th birthday but have not yet turned 18 years.
   a. Start date of the birth cohort range is 18 years prior to the assessment (report) date.
   b. End date of the birth cohort range is 13 years prior to the assessment (report) date.
   c. Example:
      - Assessment (report) date – 12/31/2018
      - Start date = 1/1/2001
      - End date = 12/31/2005

3. Patients in the applicable cohort with an “active membership” with the facility and who received one or more vaccination at the facility within one year of the assessment (report) date are included in the assessment.
   a. Facilities are responsible for maintaining their active patient membership rosters in USIIS.
   b. To remove a patient from a facility’s active patient membership roster use the USIIS “End Clinic Affiliation” feature. This can be done using two methods:
      i. **USIIS Immunize**: select “End Clinic Affiliation” on the Demographics screen of a specific patient record.
      ii. **Clinic Reports and Batch Processes**:
         A. Select **Batch Lists** from the menu.
         B. Select **Create a New Batch List** – specifying the age group whose roster you want to review.
         C. Select the **Edit/Use** button.
         D. Press the **End Clinic Affiliation** button alongside patients who are no longer active.
         E. Your patient list may be multiple pages. Select the numbers at the bottom to advance through all your patients. << < 1 2 3 4 5 6 7 8 9 10 > >>

**Immunization Assessment Status**

1. Each patient included in a childhood or adolescent assessment cohort are run through the USIIS Forecast to determine immunization coverage, invalid immunizations and missed opportunities.

2. Childhood assessments
a. Patients in the cohort are assessed at 24 months of age.
b. Vaccine rates measured, aggregated across all patients in the cohort, include:
   i. 4:3:1:3:3:1:4 series
      *Note:* “% of patients up-to-date but late” is also included in the report.
      These are patients who are currently up-to-date, but were not at 24 months of age—i.e.,
      became up-to-date late.
   ii. 4 DTaP
   iii. 3 Polio
   iv. 1 MMR
   v. Up-to-date Hib
   vi. Up-to-date Hepatitis B
   vii. 1 Varicella
   viii. Up-to-date Pneumococcal
   ix. 2 Hepatitis A
   x. 1 Influenza (based on the previously completed season, July 1 through June 30)
   xi. Up-to-date Rotavirus
   • Comparisons to Utah VFC provider averages are provided for each series/antigen.
   • Missed opportunity counts and percentages are provided for each series/antigen.
      A missed opportunity is when a patient (in the cohort) did not receive one or more
      recommended vaccinations at the last date the patient received a vaccination at the facility.

c. Active and inactive vaccine codes are counted.
d. Only valid immunizations are counted.
   i. Vaccinations are determined valid or invalid by the USIIS Forecast.
   ii. Vaccinations flagged by a provider as invalid are not counted (e.g., stored too cold, stored
      too warm, manufacture recall).
   iii. Evidence of immunity/titer is counted as up-to-date.
e. 3-year Clinic Baseline Rates for 4:3:1:3:3:1:4 – *for VFC facilities only.*
   i. USIIS displays multiple years’ coverage rates for comparing rates across years.
   ii. In 2018 the rate for only one year is available for display. In 2019 there will be values for
      two years. In 2020 and thereafter, values for three years will be available for comparison.
f. Immunization Drop-off Rates, at 24 months
   i. USIIS generates rates for two series (3:2:2:2:3 and 4:3:1:3:3:1:4) for patients at 12 months
      and at 24 months.
   ii. This will allow the facility to determine if their patients’ immunization status drop off after
      their first 12 months—e.g., drop off after a good start.

3. Adolescent assessments
   a. Patients in the cohort are assessed as of the date the report is created.
   b. Vaccine rates measured, aggregated across all patients in the cohort, include:
      i. 2 MMR
      ii. Up-to-date Hepatitis B
      iii. 2 Varicella
      iv. 1 Tdap (does not include Td)
      v. Up-to-date Meningococcal
vi. Up-to-date Polio
vii. 2 Hepatitis A
viii. Up-to-date HPV
ix. 1 HPV (series in progress)
x. 1 Influenza (based on the previously completed season, July 1 through June 30)

• Comparisons to Utah VFC provider averages are provided for each series/antigen.
• Missed opportunity counts and percentages are provided for each series/antigen. A missed opportunity is when a patient (in the cohort) did not receive one or more recommended vaccinations at the last date the patient received a vaccination at the facility.

   c. Active and inactive vaccine codes are counted.
   d. Only valid immunizations are counted.
      i. Vaccinations are determined valid or invalid by the USIIS Forecast.
      ii. Vaccinations flagged by a provider as invalid are not counted (e.g., stored too cold, stored too warm, manufacture recall).
      iii. Evidence of immunity/titer is counted as up-to-date.
   e. Patients with personal or religious school exemptions are counted in the assessment.
   f. HPV Vaccination by Age: numbers of patients with 1 and 2 HPV vaccinations are listed by age ranges—13-14 years, 16-17 years, and 13-17 years.
   g. 3-Year Baseline Rates by Vaccine Series/Antigens – for VFC facilities only
      i. USIIS displays multiple years’ coverage rates for comparing rates across years.
      ii. In 2018 the rate for only one year is available for display. In 2019 there will be values for two years. In 2020 and thereafter, values for three years will be available for comparison.
AFIX Childhood Coverage Report – sample

For an explanation of this report, see the above section **AFIX Coverage Reports Explained**.

---

**USIS AFIX Childhood Coverage Report**

**Provider facility:** TEST CLINIC C (VFC PIN: 10373)

**Date Report Generated:** 02/15/2018

**Report Criteria**

- **Age range:** 24 to 35 months as of 02/15/2018
- **Compliance by:** 24 months
- **Active Patients:** Patients who received an immunization in clinic between 02/15/2017 - 02/15/2018

---

**Coverage Assessment**

- **Number of patients assessed:** 10
- **% of patients up-to-date 4:3:1:3:3:1:4, but late:** 10%

includes children who are currently up-to-date with immunizations, but were not at 24 months--i.e., became up-to-date late

---

<table>
<thead>
<tr>
<th>Selected Series/Antigens</th>
<th>Vaccination Coverage</th>
<th>Utah VFC Average</th>
<th>Missed Opportunities (see below *)</th>
<th>Utah VFC Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of patients up-to-date</td>
<td>% of patients up-to-date</td>
<td>% of patients up-to-date</td>
<td># of patients</td>
</tr>
<tr>
<td>4:3:1:3:3:1:4 (see below ²)</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>9</td>
</tr>
<tr>
<td>DTaP (4)</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>9</td>
</tr>
<tr>
<td>Polio (3)</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>9</td>
</tr>
<tr>
<td>MMR (1)</td>
<td>4</td>
<td>40%</td>
<td>32.7</td>
<td>5</td>
</tr>
<tr>
<td>Hib (UDT)</td>
<td>2</td>
<td>20%</td>
<td>30.6</td>
<td>7</td>
</tr>
<tr>
<td>Hepatitis B (UDT)</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>9</td>
</tr>
<tr>
<td>Varicella (1)</td>
<td>4</td>
<td>40%</td>
<td>32.7</td>
<td>5</td>
</tr>
<tr>
<td>Pneumococcal (UDT)</td>
<td>1</td>
<td>10%</td>
<td>2%</td>
<td>2</td>
</tr>
<tr>
<td>Hepatitis A (2)</td>
<td>1</td>
<td>10%</td>
<td>204</td>
<td>5</td>
</tr>
<tr>
<td>Influenza (see below *)</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>10</td>
</tr>
<tr>
<td>Rotavirus (UDT)</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

---

* Missed Opportunity: immunization was recommended but not administered at date of last immunization

² 4:3:1:3:3:1:4: valid 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 Hep B, 1 Varicella, 4 PCV

*Influenza:* previous completed flu season
3-year Clinic Baseline Rates, 4:3:1:3:3:1:4 [Generated annually by the Utah Department of Health]

Date/Year

Immunization Drop-off Rates, Patients at 24 months

<table>
<thead>
<tr>
<th>Selected Series/Antigens</th>
<th>% patients up-to-date at 12 months</th>
<th>% patients up-to-date at 24 months</th>
<th>Up-to-date drop off rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:2:2:2:3 (see below *)</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:3:1:3:3:1:4 (see above *)</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 3:2:2:2:3: valid 3 DTaP, 2 Polio, 2 Hib, 2 Hep B, 3 PCV
AFIX Adolescent Coverage Report – sample

For an explanation of this report, see the above section AFIX Coverage Reports Explained.

### USiIS AFIX Adolescent Coverage Report

**Date Report Generated:** 04/23/2018

**Provider facility:** TEST CLINIC C (VFC PIN: 10373)

#### Report Criteria

- **Age range:** 13 to 17 years as of 04/23/2018
- **Compliance by:** 04/23/2018
- **Active Patients:** Patients who received an immunization in clinic between 04/23/2017 - 04/23/2018

#### Vaccination Coverage Assessment

**Number of patients assessed:** 39

<table>
<thead>
<tr>
<th>Series/Antigens</th>
<th>Vaccination Coverage</th>
<th>Utah VFC Average</th>
<th>Missed Opportunities (see below ¹)</th>
<th>Utah VFC Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of patients up-to-date</td>
<td>% of patients up-to-date</td>
<td>% of patients up-to-date</td>
<td># of patients</td>
</tr>
<tr>
<td>MMR (2)</td>
<td>16</td>
<td>41%</td>
<td>57.8%</td>
<td>24</td>
</tr>
<tr>
<td>Hepatitis B (UTD)</td>
<td>23</td>
<td>52%</td>
<td>64.5%</td>
<td>17</td>
</tr>
<tr>
<td>Varicella (2)</td>
<td>9</td>
<td>23%</td>
<td>44%</td>
<td>31</td>
</tr>
<tr>
<td>Tdap (1)</td>
<td>8</td>
<td>21%</td>
<td>31.9%</td>
<td>32</td>
</tr>
<tr>
<td>Meningococcal (UTD)</td>
<td>6</td>
<td>15%</td>
<td>38.6%</td>
<td>32</td>
</tr>
<tr>
<td>Polio (UTD)</td>
<td>16</td>
<td>41%</td>
<td>56%</td>
<td>24</td>
</tr>
<tr>
<td>Hepatitis A (2)</td>
<td>16</td>
<td>41%</td>
<td>56.4%</td>
<td>24</td>
</tr>
<tr>
<td>HPV (UTD)</td>
<td>9</td>
<td>23%</td>
<td>10.8%</td>
<td>28</td>
</tr>
<tr>
<td>HPV (1 or more doses)</td>
<td>11</td>
<td>28%</td>
<td>57.2%</td>
<td>28</td>
</tr>
<tr>
<td>Influenza (1)</td>
<td>15</td>
<td>38%</td>
<td>28.3%</td>
<td>24</td>
</tr>
</tbody>
</table>

¹ Missed Opportunity: immunization was recommended but not administered at date of last immunization

* Varicella: history of disease or received ≥2 doses of valid varicella vaccine

#### HPV Vaccination by Age

<table>
<thead>
<tr>
<th>Age Range</th>
<th># of patients with 1 HPV</th>
<th># of patients with 2 or more HPV doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14 year olds</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>15-17 year olds</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>13-17 year olds</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
**AFIX Invalid Immunizations Report – sample**

This report identifies patients who received an invalid immunization administered by the facility, with the reason the immunization was invalid.

The sample below has patient name removed.

<table>
<thead>
<tr>
<th>Patient Last, First Middle, Suffix</th>
<th>Birth Date</th>
<th>Series / Antigen</th>
<th>Date Given</th>
<th>Invalid Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>02/14/2003</td>
<td>HPV 1</td>
<td>02/21/2017</td>
<td>HPV Bivalent vaccine is not appropriate for male vaccination or cannot be validated due to missing gender.</td>
</tr>
</tbody>
</table>
AFIX Missed Opportunities Report – sample

This report identifies patients for whom the facility missed an opportunity to administer a recommended vaccination during the patients’ last visits at which another vaccination was given. Missed opportunity is based on the “recommended” date, not the “minimum age” (which CoCASA) used.

The sample below has patient names removed.

For assistance contact the IT Help Desk, 801.538.3440 or 800.678.3440.