Immunization Rates Report Quick Guide

This document is intended to provide guidance on, and clarification to, the parameters in the Immunization Rates report listed under the Coverage Statistics menu on the Reports menu in WebIZ.

Coverage Statistics

- AFIX Data Snapshot Reports
- Clinic Immunization Count
- Dosage Report
- Doses Administered
- H1N1 Vaccinations by Age and Dose
- Immunization Rates
- Invalid Doses
- Patient Counts by Age and Insurance Source
- Patients Aged Out of their VFC Eligibility Code
- Vaccinations by Funding Source
- Vaccine Borrowing Report
- VFC Category Patient Count Report

Figure 1

When you open this report, there are several criteria (vaccine/s, age range, compliance) that must be entered in order to generate the report. The report output will be different depending on the parameters used.

Report Selection Criteria

Provider/Clinic : MAJURO HOSPITAL, MAJURO HOSPITAL

SELECT A CLINIC BY TYPING PROVIDER, CLINIC, VFC PIN, OR CLINIC CODE ✕

Report Type
- ⦿ Appropriate Statistics Summary
- ◯ Patients not Properly Immunized Detail

Doses By Vaccine Series

Vaccine Series Dose Presets

[▾]

DTaP/Tdap *	Hepatitis A *	Hepatitis B *	HIB *
0	0	0	0

HPV *	Influenza *	Meningococcal *	MMR *
0	0	0	0

Pneumococcal *	Polio *	Rotavirus *	Varicella *
0	0	0	0

Tdap (Or Pertussis Containing) *
0

Age Range *

From: 19   Through: 35   UOM: MONTHS ▾

As Of Date Range *

From: MM/DD/YYYY 🗓   Through: MM/DD/YYYY 🗓

Gender
(ALL) ▾

Compliance By

Age [ ] MONTHS ▾ Or Date MM/DD/YYYY 🗓

☐ Exclude Patients with Less than 2 non- Influenza/H1N1-09 Vaccinations?

☐ Count both valid and invalid doses (i.e., Do not run Recommender to validate immunization history)?

[Run Report] [Cancel]

Figure 2

The document will work through the selection criteria from the top down. At the end, there will be examples of some reports that illustrate the different outputs.

'Provider/Clinic':

This is very straight forward. To select the provider or clinic that you want, simply begin typing the name in the box. A list of all providers and clinics enrolled in the IIS will drop down and you can select the one that you want (or 'All Providers' to generate a jurisdiction-wide report). In Figure 3, below, all providers have been selected for the report.

Provider/Clinic : ALL PROVIDERS, ALL CLINICS

[ALL PROVIDERS] ALL CLINICS ✖

Figure 3

'Report Type':

There are two options for the report: Appropriate Statistics Summary and Patients not Properly Immunized Detail.

Report Type

◉ Appropriate Statistics Summary

◯ Patients not Properly Immunized Detail

Figure 4

The Appropriate Statistics Summary provides an aggregate estimate of coverage for all the individuals in the cohort you selected, according to all the parameters you chose. Select this criterion if you want to know the overall coverage rates for a specific provider/clinic or your entire jurisdiction. The report generated is one page (details will be explained in examples later in the document).

Patients Not Properly Immunized Detail provides a list of children who are not up-to-date for the antigens/number of doses you enter. Select this criterion if you want to follow up specifically on children missing any vaccines. Please note: when this report is generated, there will be a page for each child that shows the vaccines received and the missing vaccines. Depending on how many children are missing vaccines, this report can be quite long. *Note: The Reminder/Recall list might be a better report for this purpose, especially if you are generating it for the entire jurisdiction.*

'Doses By Vaccine Series':

The series or antigens that you select will depend on the age group of interest and the schedule for your jurisdiction, or the requirements of the agency/program to whom you are reporting. This report allows for flexibility in looking at coverage rates for various vaccine series or individual antigens. Below are examples of how you would use the Vaccine Series Dose Presets as well as the individual antigens.

Example: A program you are working with wants to know series coverage for 4 DTaP, 3 Polio, **1 MMR**, 3 HepB, and 3 Hib coverage for 2 year olds. You would run the report using the Doses by Vaccine Series and select the preset series of 4:3:1:3:3 as illustrated in Figure 5 below.

Figure 5

If you typically measure 4 DTaP, 3 Polio, **2 MMR**, 3 HepB, and 3 Hib and want to look at those rates, you would use the individual antigens and enter the number of doses for each vaccine you are measuring as illustrated in Figure 2 below. Please note that the Vaccine Series Dose Presets box would be blank.

Figure 6

If you want to know the coverage rate of an individual antigen, you would indicate the number of doses of the particular antigen in the associated box and run the report. If you want to know coverage rates for 2 doses of MMR you would enter the number 2 in the box associated with MMR and leave all other boxes "0" (In order for the report to run, there has to be a number in the box). See Figure 7 below.

Figure 7

If you run a coverage report for multiple antigens, the estimate for "Patients GIVEN appropriate number of doses of all indicated antigens" at the top of the generated report reflects ALL antigens you asked for it to return. So, if you want to know what your recommended series coverage is, do not included any antigens (or number of doses of an antigen) that is not in your series. Rather, run that individual antigen separately.

'Age Range / As of Date Range':

The criteria that you select in this section of the report will determine what data is generated in the report. It is important that you understand the parameters in this section since different results have different meaning in terms of your coverage rates.

Figure 8

The age range gives you the option of Months (shown in figure 8 above) or Years. The range can be as broad as you want; the data will be further defined in the next criteria. CDC typically measures the 19 – 35 months age range to determine rates for pediatric vaccines. When measuring adolescent vaccines, it is recommended that you select Years.

As Of Date Range *

From: [MM/DD/YYYY] 📅 Through: [MM/DD/YYYY] 📅

Figure 9

With this, you can select a specific date or a range of dates. If you select today's date, the report will return coverage for all children who are in your age range as of today's date. The key point to remember about using this parameter is that it is a 'point in time' snapshot of your coverage rate. It will show you the coverage rate for all children 19 – 35 months of age on the day you run the report only. It is best to use this parameter when your leadership asks you for a coverage report.

If you select a range of dates, the report will return coverage for children who were in your selected age range at any point during the date range selected. In the example below (figure 10), the report will return coverage for all children who are 19 to 35 months of age at any time from October 1, 2017 to December 31, 2017. The key points to remember about this criterion are: a) the denominator will be different, b) this may or may not impact your coverage rates, and c) kids are aging in and out of this range. This is a good parameter to use internally if you want to gauge the trend in your coverage rates.

Age Range *

From: [19] Through: [35] UOM: [MONTHS ▼]

As Of Date Range *

From: [10/01/2017] 📅 Through: [12/31/2017] 📅

Figure 10

Additional Parameters:

After you select your report type, the vaccine series, and the ages/age range, there are additional criteria you can select for the report. The next option is Gender, which is straight forward, and the default is **All**. After that, you have the option of selecting a compliance measurement. Then, there are two optional boxes for excluding patients and counting valid and invalid doses. See figure 11 below.

Figure 11

As mentioned above, the Gender option is straight forward and does not need further explanation. In this section, the key area to focus on is the Compliance By options. You can choose compliance by age (in months and years) or date; below are explanations of both and recommendations for use.

Compliance by Age

If you select this option, you can determine the coverage rate of children who were up to date with their vaccines by whatever age you choose. If you want to know how well your program is doing at ensuring children are getting their shots by the recommended age (generally, a child should be fully immunized by 15 months), you would use this option. It is recommended that you use this option for internal, programmatic use. In figure 12 below, the parameters for the report indicate that you want the coverage rate for children who are 19 to 35 months of age by January 10, 2018 and you want to know their status at 15 months of age. (If you want to look at coverage rates for adolescents, it is recommended that you use Compliance By Years, instead of months.)

Figure 12

When you run a report using the compliance by age in months/years and find that the rate for this subset is relatively the same as the overall coverage, it can indicate that your program is doing a good job of vaccinating children on time.

Checkboxes

The two check boxes at the bottom of the page allow for further analysis of your coverage date. The first box, "Exclude Patients with Less than 2 non- Influenza/H1N1-09 Vaccinations", may be an indicator that you need to do more data cleaning. It is recommended that you run the report with and without this box checked. A large difference in the denominator may indicate that you have possible duplicates or children who received birth doses and the moved away. You don't want to see a big difference between the denominator and coverage rate.

The second box, "Count both valid and invalid doses (i.e., Do not run Recommender to validate immunization history)", is also optional. If you are running coverage for a large age range, you may want to check this box to reduce the run time and avoid a time out. Also, you can run the report with and without this box checked to get an estimate of the number of invalid doses administered. However, there are other reports (Invalid Doses) will give you better data if you want to look at this.

Example 1

The report below shows coverage rates for the 4:3:1:3:3 series for the 19 – 35 months age range as of today's date. This is an example of a report you would run if your leadership asked for the coverage rates.

Provider = (ALL PROVIDERS), Clinic = (ALL CLINICS), DTaP/Tdap Series Count = 4, HepB Series Count = 3, HIB Series Count = 3, MMR Series Count = 1, Polio Series Count = 3, Age Range = 19 - 35 (MONTHS) As Of 01/10/2018 - 01/10/2018, Exclude = Y, Count Valid And Invalid Doses = Y

	Full Data Set	Compliance Criteria Subset
Total Patients	1,741	
Total INACTIVE Patients	49	
Adjusted Total Patients	1,692	
Patients GIVEN appropriate number of doses of all indicated antigens	857 (50.65)	( )
Patients NOT GIVEN appropriate number of doses of all indicated antigens	835 (49.35)	( )
Patients Given the following vaccine combinations:		
Patients with at least 4 valid/invalid doses in the DTaP/Tdap vaccine series	921 (54.43)	( )
Patients with at least 3 valid/invalid doses in the Polio vaccine series	1,302 (76.95)	( )
Patients with at least 1 valid/invalid doses in the MMR/Measles vaccine series	1,420 (83.92)	( )
Patients with at least 3 valid/invalid doses in the Hib vaccine series	1,072 (63.36)	( )
Patients with at least 3 valid/invalid doses in the HEPB vaccine series	1,363 (80.56)	( )

The data in the red box shows all the criterion you selected:

        Provider (All providers)

        Vaccines (4 DTaP, 3 Hep B, 1 MMR, 3 Polio, 3 HIB)

        Age range (19 – 35 months)

        Excludes patients with less than 2 non-flu vaccines

        Counts valid and non-valid doses

The data in the green circle shows the denominator and coverage rate to the entire data set generated in the report. In this report, 857 of 1,692 patients (total active patients) have a coverage rate of 50.65%.

Example 2

This is the same report as shown in Example 1, but is further defined to show the coverage rate of the children (19 to 35 months) when they were aged 15 months. This report is one that you would use internally for programmatic purposes.

Provider = (ALL PROVIDERS), Clinic = (ALL CLINICS), DTaP/Tdap Series Count = 4, HepB Series Count = 3, HIB Series Count = 3, MMR Series Count = 1, Polio Series Count = 3, Age Range = 19 - 35 (MONTHS) As Of 01/10/2018 - 01/10/2018, Compliance Age = 15 (Months), Exclude = Y, Count Valid And Invalid Doses = Y

	Full Data Set	Compliance Criteria Subset
Total Patients	1,741	
Total INACTIVE Patients	49	
Adjusted Total Patients	1,692	
Patients GIVEN appropriate number of doses of all indicated antigens	857 (50.65)	577 (34.10)
Patients NOT GIVEN appropriate number of doses of all indicated antigens	835 (49.35)	1,115 (65.90)
Patients Given the following vaccine combinations:		
Patients with at least 4 valid/invalid doses in the DTaP/Tdap vaccine series	921 (54.43)	615 (36.35)
Patients with at least 3 valid/invalid doses in the Polio vaccine series	1,302 (76.95)	1,112 (65.72)
Patients with at least 1 valid/invalid doses in the MMR/Measles vaccine series	1,420 (83.92)	957 (56.56)
Patients with at least 3 valid/invalid doses in the Hib vaccine series	1,072 (63.36)	740 (43.74)
Patients with at least 3 valid/invalid doses in the HEPB vaccine series	1,363 (80.56)	1,200 (70.92)

In the purple box above, you can see the coverage information for the full data set (the left column) and the coverage information for the subset (15 months – right column). In this case, you can see that only 34.10% of children were vaccinated by 15 months.