

MODULE 11 – Evaluation of the VFC Program



NCIRD Website: <http://www.cdc.gov/vaccines/default.htm>

IPOM: <http://www.cdc.gov/vaccines/vac-gen/policies/ipom/>

PAPA Website: <http://www2a.cdc.gov/nip/irar/grantee/granteeinfo.asp#grptg>

CDC Evaluation Workgroup: <http://www.cdc.gov/eval/index.htm>

Immunization Program Evaluation Website:

<http://www.cdc.gov/vaccines/programs/progeval/>

Overview: Why Evaluate Your VFC Program?

Evaluation is a critical component of the VFC program. A considerable amount of funding and resources is invested in implementing and managing the VFC program at both the federal and grantee levels every year. It is important to ensure that this investment is managed appropriately and that the program is achieving its desired outcome of administering viable vaccine to eligible children.

This module is intended to provide guidance to grantees on how to use the VFC Management Survey and the Program Annual and Progress Assessment (PAPA) website to evaluate their VFC program's processes and outcomes. VFC program areas that should be regularly evaluated, and that can be assessed through these tools, include: provider recruitment, enrollment, communications, provider satisfaction with the VFC program, provider storage and handling practices, and site visits. General evaluation resources are included and briefly described in the last section of this module.

VFC Management Survey

The VFC Management Survey is a web-based data collection tool that grantees are required to complete and submit to CDC annually by March 1. The survey collects aggregated data from VFC Site Visit Questionnaires and provides an overview of a grantee's immunization policies, program activities, and accountability measures for the previous year.

Completing the VFC Management Survey

The VFC Management Survey is divided into two main sections. The first section requires information on the number of enrolled providers and how the VFC program

Publication Date: August 2007

Revision Date: January 2011

operates within the grantee's geographic area. This section also requires information on discovered, reported and referred fraud and abuse allegations. The second section requires information on staff (FTEs) working on VFC/AFIX activities, VFC provider contacts, VFC provider coverage levels, VFC provider compliance with VFC high-priority questions, and follow-up activities during the previous year.

In order to complete the survey, grantees need to have an understanding of VFC-related policies in their jurisdictions, as well as access to fraud and abuse allegation reports for the year and provider enrollment and vaccine ordering records. Grantees also need access to a system that will allow them to collect and compile the data elements in the second section of the survey. Grantees can choose to use the Comprehensive Clinic Assessment Software Application (CoCASA) or their own database for this purpose. Brief descriptions of both of these options are provided below.

Comprehensive Clinic Assessment Software Application (CoCASA)

CoCASA is a tool for assessing vaccine coverage, VFC/AFIX activities, and provider compliance with high-priority questions from the VFC Site Visit Questionnaire. This software was developed by CDC and can be downloaded from the CDC website free of charge. CoCASA has data entry and import capabilities. After immunization data have been entered into CoCASA, data analysis can be conducted to pinpoint strengths and areas of improvement for an individual immunization provider.

There are two specific reports that grantees can generate from CoCASA to complete the VFC Management Survey: the VFC/AFIX Core Report and the VFC Site Visit Questionnaire Results Report. Both reports must be generated from January 1 to December 31 of the previous year for the completion of the survey. Other CoCASA reports that can serve as valuable evaluation tools for grantees are discussed under the *Other Evaluation Tools* section in this module.

Grantee-developed system

Grantees can use any database, software or system that will allow them to collect, compile and report the data required in the second section of the VFC Management Survey. At a minimum, grantee-developed systems much include:

- Provider sites visited at least once during the year
- Provider contacts by type of visit and type of provider
- AFIX methods used
- Childhood and adolescent coverage levels
- Number of private and public providers that were non-compliant for each of the high-priority administrative and storage and handling questions
- Corrective actions recommended for public and private providers
- Vaccine borrowing practices

The VFC Site Visit Questionnaire and the VFC Management Survey undergo revision every year and any changes are reflected in CoCASA. Grantees are responsible for

Publication Date: August 2007

Revision Date: January 2011

ensuring that their data collection systems are updated to reflect any changes in these documents.

Ensuring Data Reliability and Accuracy

The VFC Management Survey can be a valuable evaluation resource for grantees only if its data are reliable. Given that most of the VFC Management Survey is completed with aggregated data from the VFC Site Visit Questionnaires, it is important for grantees to ensure that their staff is filling out the VFC Site Visit Questionnaires accurately. Staff conducting site visits must have a clear understanding of the questions and why they are asked, answer options and terms used throughout the questionnaire (see Module 9). They should also have a clear understanding of how to complete the questionnaire during a compliance site visit (see Module 5) and be able to do so consistently. Grantees are required to provide ongoing training and periodic observation of site visits to help ensure that data collected through VFC Site Visit Questionnaires are reliable.

Grantees must also ensure that data submitted in the VFC Management Survey are accurate and consistent. It is important for grantees to have a clear understanding of the information that is required in different sections of the survey. Grantees are encouraged to seek guidance from the VFC/AFIX staff in the Program Operations Branch at CDC if they have any questions regarding how to complete specific sections. One table that grantees have had difficulty completing in previous years is the FTE table, Table 2.

Completing Table 2: Number of FTEs Working on VFC and/or AFIX Project

This table requires information on the full-time equivalent (FTE) employees that worked on VFC and/or AFIX during the previous year. In this table, grantees are expected to report only the fraction of a full time employee's time that was spent working on VFC or AFIX activities. Grantees are required to report the amount of staff time being spent on VFC/AFIX and the proportion of that time being spent conducting site visits. Grantees can use this information to evaluate program priorities, modify staff responsibilities, and ensure that staff activities and funding sources are aligned.

In order for a staff person to be counted as 1 FTE in this table, they should be a full-time employee spending 100% of their time in VFC and/or AFIX activities. For example, if a full-time employee spent half of their time conducting VFC site visits and half of their time coordinating a childhood immunization campaign, they would represent .5 FTE in "FTEs that conduct VFC or AFIX site visits." If the childhood immunization campaign is related to the VFC or AFIX program, this person would represent .5 FTE in "All other VFC/AFIX FTEs." If the childhood immunization campaign is not related to the VFC or AFIX program, the time they spent on that activity would not be included in this table.

It is also important for grantees to ensure that data submitted in different sections is consistent. Cross-checking the data in the VFC Management Survey before submitting it to CDC can ensure accuracy and consistency throughout the document. Grantees are strongly encouraged to conduct at least two specific cross-checks before submitting their

Publication Date: August 2007

Revision Date: January 2011

VFC Management Surveys. Each of these cross-checks is briefly described below and involves data from *Table 4: Completed Provider Contacts by Activity*.

- Cross-check #1: The sum of reported “VFC Only” and “VFC/AFIX visits” for public and private providers in Table 4 of Section I. VFC/AFIX Core Activities **must equal** the number of compliance site visits for public and private providers reported at the beginning of Section II.”VFC Accountability.”
- Cross check #2: The sum of reported “VFC Site Visit follow ups,” “Secondary Educational Follow Ups,” and “Tertiary Educational Follow Ups” reported in Table 4 of Section I. VFC/AFIX “Core Activities” **must equal** the sum of reported “Telephone call,” “Site visit,” “Suspended delivery of vaccine,” and “Other” follow-up plans in the VFC Administration Guidelines table at the end of the survey.

Using Collected Data for Program Evaluation

Data collection and data cleaning by themselves do not equal evaluation or lead to the improvement of program processes and outcomes. After ensuring that data is collected accurately and consistently, grantees must carefully look at the data. Collecting data is useless unless the data is analyzed, understood and used to make informed program decisions and help determine priorities. Grantees should have a plan in place to regularly analyze and use any data that they are collecting. This plan should include a timeline for when data will be analyzed, who will be responsible for analyzing the data and which decision-making stakeholders will be informed of the findings.

Carefully looking at data can help grantees identify and address problematic practices, vaccine misuse, fraud and/or abuse, and reporting errors in a timely manner. It is beneficial for grantees to encourage all of their staff to carefully look at the data that they collect and receive. When looking at data, grantees should ask questions such as:

- Does this data reflect the realities of the program as we know them?
- Is this information consistent with what we know about the populations being served in this area, birth cohorts, doses required for specific vaccines, etc.?
- Does this data reflect compliance with program policies?
- Is there anything that seems strange, surprising or does not make sense?
- Does anything look very different from previously reported data? If so, do we know what has caused this change?

Program Evaluation Measures from the VFC Management Survey

A grantee’s VFC Management Survey offers a snapshot of its VFC program for the previous year. Carefully and thoughtfully reviewing the answers to the questions in the VFC Management Survey can assist grantees with identifying program processes and activities that are working adequately, as well as those that are performing poorly. Measures of different program processes and activities, available through data from the survey, are listed and explained below. Grantees must ensure that marked differences

between public and private providers in any of these measures are carefully assessed and addressed. Both public and private providers are critical for the success of the VFC program, and grantees must ensure that they are being enrolled, engaged and supported.

- Proportion of Enrolled Providers that are Active
Ideally 100% of VFC-enrolled providers should be active. Although a number of circumstances might prevent a small group of providers from ordering VFC vaccine in any given year, at least 90% of enrolled providers in any of the categories in *Table 1. VFC Provider Enrollment* should be active. Lower proportions of enrolled providers that are active could be a sign of poor provider education on how to order VFC vaccine, poor provider participation in the VFC program, unaddressed vaccine ordering barriers, and/or enrollment of providers that do not serve VFC-eligible children.
- Proportion of Vaccine Doses Administered in Family Planning Clinics
Unaccompanied minors under the age of 19 without insurance status presenting at family planning clinics are eligible for VFC vaccine. Family planning clinics must screen these minors and report administered vaccine to grantees on a monthly basis (see Module 3). Grantees should review these forms regularly and ensure that any clinic submitting these reports is a family planning clinic according to CDC's definition (see Module 3 of this *VFC Operations Guide*). Grantees should also make sure that the number and types of administered vaccines reported is adequate for the clinic's population. Data reported on the VFC Management Survey can help grantees further ensure that the overall proportion of vaccines being administered in family planning clinics is adequate considering the number of family planning clinics, the population they serve, and the adolescent birth cohorts in the grantee's geographic area. Vaccine doses administered that exceed the needs of the grantee's adolescent birth cohort and/or the proportion of that cohort being served by VFC-enrolled clinics can indicate vaccine misuse, fraud, and/or abuse.
- Proportion of Providers that Received a VFC Compliance Site Visit
Grantees must conduct compliance site visits to at least 50% of their VFC-enrolled and active providers annually (see Module 8). Grantees conducting compliance site visits to less than 50% of their providers must further evaluate their program to identify factors that will enable them to meet this requirement. Some of the program areas that grantees can further evaluate include: time spent on required and non-required VFC program activities, priority and purpose of data collected on Section Two of the VFC Site Visit Questionnaire during compliance site visits, compliance site visit coordination, and compliance site visit follow-up.

Please Note: Grantees are required (at a minimum) to conduct compliance site visits to 50% of their enrolled and active public providers and 50% of their enrolled and active private providers annually. Grantees can look at the proportion of public and private providers that received site visits separately to assess their compliance with this requirement.

- Administrative and Storage and Handling High-Priority Questions with 5% or greater / 10% or greater Non-Compliance Among Providers
Provider compliance with VFC program requirements is measured through high-priority questions. These questions are included in the VFC Site Visit Questionnaire that grantees are required to administer during compliance site visits. The VFC Management Survey reports the aggregate count of providers that answered each one of the high-priority questions incorrectly and are therefore, in non-compliance with the requirement the question monitors. These aggregate results are one of the most valuable sources of data for grantees.

In general, questions with 10% or greater non-compliance among private and/or public providers represent a potentially serious threat to the integrity of the VFC program. There are four key high-priority questions that are considered critical and for which 5% or greater non-compliance level among private and/or public providers is considered a serious threat to the integrity of the VFC program.

These key high-priority questions are:

- When does the clinic/practice screen patients for VFC eligibility?
- What type of storage units does this clinic/practice use as permanent units to store varicella-containing vaccines and all other vaccines?
- Are working thermometers placed in a central area of each refrigerator and freezer?
- When the temperatures were outside the recommended range, what action did the clinic practice take?

These levels of non-compliance among private and/or public providers can indicate: poor provider knowledge of program requirements, high provider staff turn-over, and/or VFC staff who need additional training in order to fully educate VFC-providers on program requirements.

- Proportion of Planned Corrective Actions Implemented
All corrective actions that are recommended after a compliance site visit must be implemented and reported. There might be a few instances in which a planned corrective action might be deemed unnecessary or inappropriate after it has been recommended, but this should not be the norm. High proportions of recommended corrective actions that are not implemented can indicate lack of follow up by staff, lack of structure for the implementation of corrective action activities at the grantee level, and/or under-reporting of corrective actions by staff.

Program Annual Progress Assessments (PAPA) Website

The Program Annual Progress Assessments (PAPA) open website [<http://www2a.cdc.gov/nip/irar/grantee/granteeinfo.asp#grptg>] provides access to immunization-related annual reports for all grantees dating back to 2001. VFC Management Survey data can be accessed through both the “Grantee Reports” and the “Summary Reports” when “VFC” is selected. These reports can be valuable resources

Publication Date: August 2007

Revision Date: January 2011

for grantees that want to evaluate their program over a period of years, learn about other grantee's programs and/or compare their program with those of other grantees.

VFC Management Survey Reports

VFC Management Survey Reports provide the answers to all VFC Management Survey questions for a specific grantee and year. Grantees can access surveys from previous years to look at time trends for different program areas such as enrollment, site visits conducted, and/or non-compliance with high-priority questions. Grantees can also use these reports to learn more about other grantee's VFC programs and compare their overall program with those of other grantees. It might be particularly valuable for grantees to learn more about the VFC programs of grantees in the same geographical region, with comparable population size, with similar vaccine-purchase policies, and/or with a comparable number of enrolled providers.

To generate a VFC Management Report go to the PAPA open website. The top section of the webpage titled "Grantee Reports" includes information on individual grantee annual reports by topics. In this section, select the grantee and desired year for the report. Select "VFC" from the menu of topics and click on the "Display Report" icon. The VFC Management Survey for the selected grantee and year will be displayed.

VFC Summary Reports

A VFC summary report provides the responses from all grantees that reported on a specific question from the VFC Management Survey for a specific year. Grantees can use these reports to get an idea of how they compare to the overall universe of VFC grantees in specific questions or program areas. These reports can also be used to identify grantees that can serve as examples or resources for reaching desired program objectives. For example, if a grantee wants to increase the percentage of providers that answer all 6 administrative high-priority questions correctly, they can use this report to identify grantees with a high percentage in this question and then contact these grantees to learn more about how they achieved that specific outcome.

To generate a summary report, go to the PAPA open website. The bottom section of the webpage titled "Summary Reports" allows users to create summary reports from annual reports and progress assessments by topics. In this section, select the desired year for the report. Select "VFC" from the menu of topics and click on the "View Menu" icon. The VFC Reporting Menu Screen allows the grantee to select one specific question from the selected year's VFC Management Survey. After selecting the desired question, click on the "Run" icon located in the same section as the question selected. The requested report will be displayed. In some reports the data displayed can be sorted by the variables in blue font.

Other Evaluation Tools

CoCASA Reports

Thoughtful and periodic review of the aggregate data available through CoCASA VFC/AFIX reports can help grantees identify program areas that require immediate intervention as well as monitor changes once interventions are implemented. CoCASA reports can be generated for any time period the grantee wishes to evaluate and can focus on providers' responses to Section One of the VFC Site Visit Questionnaire, Section Two of the VFC Site Visit Questionnaire, or custom questions grantees administer during compliance site visits inputted into CoCASA.

Grantees should become familiar with all of the reports and lists that can be generated through CoCASA. In addition to the VFC/AFIX Core Activities Report and the VFC Site Visit Questionnaire Results Report used to complete the VFC Management Survey, grantees might find the following CoCASA reports and lists helpful:

- **Aggregate VFC Non-Compliant Summary Report**
This report provides the number and percentage of public and private providers that were non-compliant with administrative and storage and handling high priority questions. Grantees can use this report to assess compliance differences between public and private providers. For example, if 2% of public providers and 15% of private providers are non-compliant in the same question, the grantee might want to assess what is causing a higher percentage of private providers to be non-compliant with this question and tailor specific interventions to them.
- **Providers Receiving At Least One Visit**
This list can help grantees determine which providers were visited at least once throughout any specific time period. It can be a valuable tool for grantees to coordinate site visits for their providers and ensure that 50% of their enrolled and active providers are visited one year, and the other 50% is visited the next year.
- **VFC Non-Compliant Providers**
This list can be a valuable resource for grantees that choose to consider previous non-compliance as a factor for prioritizing compliance site visits. This list can also help grantees determine which providers need to be targeted for non-compliance educational interventions and/or out-of-schedule follow ups.

VFC-Enrolled Providers

Providers enrolled in the VFC program can be some of the best sources of information for evaluating what aspects of the VFC program are or are not working optimally. One method for collecting provider opinions is through a provider satisfaction survey. A generic example of a provider satisfaction survey can be found in Appendix 7. If a survey is done, the grantee will need to determine which VFC providers to include, what questions to ask in the survey, how to conduct the survey and how to analyze the results.

Publication Date: August 2007

Revision Date: January 2011

In addition to evaluating operational components, provider surveys can be used to gather information on the educational needs of enrolled providers or their responses to education provided. Findings can determine what quality improvement projects should be undertaken by the grantee. For example, if survey results indicate that a significant portion of the providers who received education on completing a VFC accountability form are not completing the form because it is too complicated, a quality improvement project might be needed to simplify the form.

Evaluation Resources

Several resources are available to grantees requiring assistance or further information on program evaluation. The best place to start is with the CDC project officer assigned to each immunization grantee. The project officer can direct the grantee to specific individuals who can assist in developing, implementing, or interpreting evaluation measures for the VFC program.

The CDC Evaluation Workgroup has a website to assist programs and individuals in learning more about program evaluation. The website is located at:

<http://www.cdc.gov/eval/index.htm>. Specific resources within the website include:

CDC Evaluation Framework: <http://www.cdc.gov/eval/framework.htm>

CDC Evaluation Self Study Guide: <http://www.cdc.gov/eval/evalguide.pdf>

Evaluation Resources: <http://www.cdc.gov/eval/resources.htm>

Immunization specific evaluation resources can be found in the Immunization Program Evaluation website located at: <http://www.cdc.gov/vaccines/programs/progeval/>.

This document can be found on the CDC website at:

<http://www.cdc.gov/vaccines/programs/vfc/downloads/vfc-op-guide/15-module-11.pdf>