



Immunization Information System HEDIS Query Interface Specification

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ENVISION
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Change Log

The following table captures the progression of this document over time.

Version	Date	Description	Author
1.0	07.10.2006	Initial creation of document.	Ray Seggelke
2.0	06.24.2013	Update with latest rules/file formats	Nichole Lambrecht
3.0	02.18.2015	General update and format edits	Nicole Bumgardner
4.0	06.14.2019	Update the input and output file tables to include phone and email and add additional matching logic on names.	Deb Murphy

Overview

The Healthcare Effectiveness Data and Information Set (HEDIS) is a collection of standardized performance measures for managed care organizations. HEDIS was developed and is maintained by the National Committee for Quality Assurance (NCQA). Consumers can use HEDIS data to compare the performance of health plans with each other and to national or regional benchmarks. Many of the measures focus on preventative care including immunization rates of insured patients.

Obviously, insurance companies are aware of the immunizations that have been submitted for payment as part of a claim. However, for many members, the claims data for a particular insurance plan or company may only be a partial snapshot of the member's full immunization history. WebIZ contains vaccinations for patients from a wide variety of data sources. It is a logical source of immunization data in complimenting an insurance plan's existing data.

The goal of the HEDIS Query Interface is to provide a standardized, automated mechanism for insurance companies to request data from WebIZ to support its HEDIS reporting requirements.

Significant Design Decisions

The HEDIS reporting requirements are updated on a regular basis. In order to ensure health insurance companies receive data on the relevant individuals, each insurance company will identify the set of patients for whom they need vaccination information for. This will minimize the risk of WebIZ inadvertently omitting any patients due to incomplete insurance data.

Because of the sensitive nature of the information being exchanged, all data files to be sent will be uploaded or downloaded directly into or out of WebIZ.

Due to the potentially large number of records that may need to be processed, all query requests will be processed offline via scheduled jobs that run during off-peak hours (e.g. evenings and weekends).

When defining a matching algorithm, there is always a balance between making the rules strict enough to limit the number of false matches while slack enough to limit the number of missed opportunities to match a record. For this interface, the rules tend to lean to more strict since there is no manual intervention to resolve situations where multiple records match.

Interface Specification

1.0 Uploading the Request File

Any user requesting immunization information to support HEDIS reporting will be required to have a username and password in order to access WebIZ. Each user account must be associated with the appropriate provider organization(s) in WebIZ and must be given access to the Reports module and specifically the HEDIS Report Category. (It will be up to the jurisdiction to determine any further permissions HEDIS users should be given to access data manually.)

The report *HEDIS Queries* has been added to the HEDIS Report Category. This report will display a list of all existing requests associated with a user's default Provider and Clinic. From here, the user can choose to review an existing request or create a new one.

When creating a new request, the following information will be required:

- Owing Provider and Clinic – This will be defaulted to the user's default Provider and Clinic, however can be altered to any active Provider/Clinic that the user is associated with. (The options displayed in these fields will be controlled similarly to most report criteria screens.)
- Upload File – The user will browse for the request file to submit. (Data files submitted to WebIZ will be stored in the database in order to ensure the security of the data.)

The following table outlines the format of an incoming request file. The file must be a pipe (“|”) delimited text file, and each new record must be on a new line. Any file being submitted to WebIZ **MUST** comply with this format.

Data Field	Data Type	Required?	Conversion Notes
Member ID	Character	N	The unique member identification number for the patient in the insurance company's system. If the insurance company does not have a Member ID or does not wish to include it, the field may be left blank.
Last Name	Character	Y	The Last Name of the person. Will be used to find the individual in WebIZ by searching for matches to the patient last name, alias last name, and birth record last name fields. This is a required field. Any record without a valid value in this field will produce an error on the error log.

Data Field	Data Type	Required?	Conversion Notes
First Name	Character	Y	<p>The First Name of the person.</p> <p>Will be used to find the individual person in WebIZ by searching for matches to the patient first name, alias first name, and birth record first name fields.</p> <p>This is a required field. Any record without a valid value in this field will produce an error on the error log.</p>
Middle Name	Character	N	<p>The Middle Name of the person.</p> <p>Will only be used for matching when multiple matches are found based on the first name, last name, and date of birth fields.</p> <p>This is an optional field and can be left blank.</p>
Suffix	Character	N	<p>The suffix in the person's name.</p> <p>Will only be used for matching when multiple matches are found based on the first name, last name, and date of birth fields.</p> <p>This is an optional field and can be left blank.</p>
Date of Birth	MM/DD/YYYY	Y	<p>This is the person's date of birth.</p> <p>Will be used to find the individual in WebIZ.</p> <p>This is a required field. Any record without a valid value in this field will produce an error on the error log.</p>

Data Field	Data Type	Required?	Conversion Notes
Gender	Character	N	<p>This is the individual's gender.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • F: Female • M: Male • T: Transgendered • U: Unknown <p>Will only be used for matching when multiple matches are found based on the first name, last name, and date of birth fields.</p> <p>This is an optional field and can be left blank.</p>
Social Security Number	999999999	N	<p>The SSN of the individual.</p> <p>Will be used to search for the SSN of the individual in WebIZ.</p> <p>This is an optional field and can be left blank.</p>
WebIZ ID	Numeric	N	<p>If the vaccination history has been received for the patient in a prior request, the insurance company's system may have stored the WebIZ ID. When this occurs, the WebIZ ID can be specified in this field as part of subsequent requests.</p> <p>Will be used only when multiple matches are found based on the first name, last name, and date of birth.</p> <p>This is an optional field and can be left blank.</p>
Phone Number	Numeric	N	<p>Will be used only when multiple matches are found based on the first name, last name, and date of birth.</p> <p>This is an optional field and can be left blank.</p>

Data Field	Data Type	Required?	Conversion Notes
Email Address	Character	N	Will be used only when multiple matches are found based on the first name, last name, and date of birth. This is an optional field and can be left blank.

2.0 Processing the Request File

An automated job will generate every night to search for any outstanding requests scheduled to be run. For each patient in the request file, WebIZ will attempt to locate any and all matching patient records. (The description of the matching algorithm below is not intended to imply anything regarding the technical design of the queries used to locate matching records. It simply describes the general concept of how the searches operate.)

1. WebIZ will search for any record(s) where all of the following criteria exist:
 - a. First and Last name supplied match the patient's name, the patient's alias name, or the patient's birth record name in WebIZ
 - b. Date of Birth supplied matches the patient's DOB in WebIZ
2. If Step 1 resulted in a single match, then the search is completed and the vaccination history of the matching record is added to the output file. Otherwise the search continues to Step 3.
3. If Step 1 resulted in multiple matches, the following filters will be applied in the order indicated until either a single record remains or until applying the filter results in no remaining matches:
 - a. WebIZ ID
 - b. Social Security Number (only utilized if full Social Security Number is collected)
 - c. Middle Name
 - d. Gender
 - e. Suffix
 - f. Email Address (only utilized if System Parameter 'USE PHONE/EMAIL MATCHING IN HEDIS' is set to YES)
 - g. Phone Number (only utilized if System Parameter 'USE PHONE/EMAIL MATCHING IN HEDIS' is set to YES)
4. If Step 3 resulted in a single match, then the search is completed and the vaccination history of the matching record is added to the output file. Otherwise, the search continues to Step 5.
5. WebIZ will search for any record(s) with all of the following criteria:
 - a. Date of Birth supplied matches the patient's DOB in WebIZ.
 - b. Both of the following statements are true:
 - i. The Last Name supplied matches the patient's last name, alias last name, a flipped version of a hyphenated name, or birth record last name in WebIZ

- ii. The First Name supplied matches the patient’s first name, alias first name, or birth record first name in WebIZ.
- 6. If Step 5 resulted in a single match, then the search is completed and the vaccination history of the matching record is added to the output file. Otherwise, the search continues to Step 7.
- 7. WebIZ will search for any record(s) where all of the following criteria is met:
 - a. The WebIZ ID is supplied and matches the patient’s ID in WebIZ.
 - b. Date of Birth supplied matches the patient’s DOB in WebIZ.
 - c. Both of the following are true:
 - i. The Last Name supplied matches the patient’s last name, alias last name, a flipped version of a hyphenated name, or birth record last name in WebIZ
 - ii. The First Name supplied matches the patient’s first name, alias first name, or birth record first name in WebIZ.
- 8. Based on the number of records in the resulted after Step 7, WebIZ will finish the search and select one of the following actions:
 - ☞ If there are no matching records or multiple matching records, WebIZ will update the results file as appropriate.
 - ☞ If there is a single matching record, WebIZ will add the patient’s vaccination history to the output file.
 - ☞ If there are multiple matching records, WebIZ will continue to the next step.

Note: Based on the above rules, no patient records will be returned from WebIZ as a match to a HEDIS query if the patient record does not have a date of birth listed.

If any of the required fields (as identified in the previous table) are missing or contain an invalid entry, WebIZ will not search for the associated patient and instead will return an error for the required data.

3.0 Retrieving the Results

A user can retrieve the generated results by accessing the same report screens used to submit the initial request file. The only difference being instead of adding a new result set, the user will simply view the details of an existing request. On the *Results* screen, the user will have the ability to download the results file.

The following table identifies each of the fields included in the output file that will be created by WebIZ and returned to the insurance company. The file will be a pipe (“|”) delimited text file, and each record will be on a new line.

Data Field	Data Type	Conversion Notes
Requested Member ID	Character	This is the Member ID field supplied in the search request data file from the insurance company.

Data Field	Data Type	Conversion Notes
Requested Last Name	Character	This is the Last Name field supplied in the search request data file from the insurance company.
Requested First Name	Character	This is the First Name field supplied in the search request data file from the insurance company.
Requested Middle Name	Character	This is the Middle Name field supplied in the search request data file from the insurance company.
Requested Suffix	Character	This is the Suffix field supplied in the search request data file from the insurance company.
Requested Date of Birth	MM/DD/YYYY	This is the Date of Birth field supplied in the search request data file from the insurance company.
Requested Gender	Character	This is the Gender field supplied in the search request data file from the insurance company.
Requested Social Security Number	999999999	This is the Social Security Number field supplied in the search request data file from the insurance company.
Requested WebIZ ID	Numeric	This is the WebIZ ID field supplied in the search request data file from the insurance company.
Requested Phone Number	Numeric	This is the phone number field supplied in the search request data file from the insurance company.
Requested Email Address	Character	This is the email address field supplied in the search request data file from the insurance company.
WebIZ ID	Numeric	This is the unique ID of the matched patient in WebIZ. This is provided for insurance companies that would like to store the WebIZ ID in their systems to be used in future requests and/or to document the source of the vaccination information they are receiving.
WebIZ Last Name	Character	The last name of the matched patient from WebIZ.

Data Field	Data Type	Conversion Notes
WebIZ First Name	Character	The first name of the matched patient from WebIZ.
WebIZ Middle Name	Character	The middle name of the matched patient from WebIZ.
WebIZ Suffix	Character	The suffix portion of the matched patient's name.
WebIZ Date of Birth	MM/DD/YYYY	This is the matched person's date of birth.
WebIZ Gender	Character	The gender of the matched patient.
Match Status	Numeric	Indication of whether or not the WebIZ was able to find a matching record. The values are: <ul style="list-style-type: none"> • 0 – No matching record found; no vaccination records returned for this patient • 1 – Single matching record found; all known vaccinations returned for this patient. • 2 – Multiple matching records found; no vaccination records returned for this patient
CVX Code	Numeric	The CVX code (as assigned by the CDC) for the corresponding vaccination.
CPT Code	Numeric	The CPT code corresponding to the vaccination that was administered.
Administration Date	MM/DD/YYYY	Date the associated vaccination was administered.
History of Varicella	Character	Indication of whether or not a history of Varicella disease has been recorded for the patient. Valid Values: Y, N
Date of Varicella Disease	MM/DD/YYYY	Date of history of Varicella disease (if indicated). Only the most recent date will be included. Note: This field will only contain a value if the previous field is indicated as 'Y' and a date has been entered into WebIZ
Date Last Updated	MM/DD/YYYY	The date this vaccination record was last updated in WebIZ.

All known immunizations for a patient will be provided in response to each request that results in a single record from WebIZ (even if the insurance company has previously requested and received the patient's information). The output file will have one vaccination per line. For example, if a person has 12 vaccinations in their record in WebIZ, the patient will appear 12 times in the output file (one vaccination indicated for each line).

From the same screen, the user will also be able to review any error or warning messages generated while processing the request file.

Additional Items for Implementation

The Jurisdiction's staff will need to create the applicable Provider/Clinic organizations within WebZ.

Each user will need to have access to the HEDIS Report Category and will be assigned a unique login following the standard user account set-up procedures in place at the Jurisdiction. These user accounts will need to be associated with the applicable provider(s)/clinic(s).