Provider Data Import (PDI)

Specifications Document

Revision 1.4

February 2009

I. Overview

The Provider Data Import (PDI) is designed to provide an easy 'intermediate step' in the complicated process of importing data from other applications into CAREWare. It utilizes an Access database to provide a standard format for data that the CAREWare business tier can then use to populate the CAREWare database. Thus a user can populate a few tables in an easy-to-use Access format and CAREWare will do the rest. In its current iteration it is able to import all data necessary to run an RDR, which includes clients, annual review information, services, referrals, diagnoses, pregnancies, medications, labs and screenings.

1. The File

As a default, CAREWare will be configured to import MS Access 2000 database files, though the central site may alter a business tier setting that would allow other data formats. If applicable, the central site will provide a blank file that can be used as a template. That file will contain empty tables: *exp_header*, *exp_client*, *exp_service*, *exp_annual_review*, *exp_referral, exp_diagnosis, exp_medication, exp_pregnancy*. The relational structure of these tables is simple: *exp_service*, *exp_annual_review*, *exp_referral, exp_diagnosis, exp_medication, exp_pregnancy, exp_immunization* have foreign keys that refer to the primary key in *exp_client*. Note that these tables have primary keys as well, even though these are not referenced by foreign keys in other tables. The table *exp_provider*, which will contain basic information about the exporter, will not be a part of the relational structure.

The only requirement for filenames will be that they have the .mdb extension that is common for MS Access databases. However, the central site may require a site ID and an export date in the filename to make file management easier.

2. The Data

Exporters are recommended to include any record that was added, edited, or deleted since the most recent export. The export files can contain data from any range of dates, though it will be important for the central site to be able to know the chronological sequence of the export files. The import process will add new records and edit or delete existing records based on rules for each record type:

CLIENT records will be imported and matched based on the client's URN (this value is generated by CAREWare based on the client's first name, last name, gender, and DOB). An incoming client record that generates the URN of an existing client will be treated as the same client and the existing client record may be updated based on options chosen by the user running the import (see below).

Note: *The client's first and/or last names can be excluded from the client records if necessary, but Date of Birth (DOB) and Gender are always require. In this case the EURN (Encrypted URN) field for each client <u>will be required</u>, as it will be used to match existing clients instead of the URN. For help with generating valid EURN values:*
- *See Appendix A for information and sample code for programmatically creating an EURN for clients.*

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- *See [Appendix B](#) for information on using the access mdb template file to automatically create the EURNs.*

Client records should be included if they have been added or edited since the last export OR if any other record related to that client is included (ie any service, referral, annual review, etc). Deletion of client records will not be handled through the export/import process.

ANNUAL REVIEW records for the same client for the same year will be considered the same record. If there is an existing record, it may be updated based on options chosen by the user running the import (see below).

NOTE:

For Client and Annual Review records, the central site has the option of overwriting existing data according to the following rules:
- If a client is associated only with the provider that sent the current import, the incoming record always overwrites the existing record.
- For Client and Annual Review data shared by multiple providers the user specifies whether an incoming value should overwrite an existing value on an import-by-import basis. There are 2 exceptions to this:
    - An incoming Null value never overwrites a non-Null value.
    - An incoming "Unknown" value never overwrites a non-Null value. ("Unknown" values exist in the following fields: cln_gender, cln_hispanic, cln_vital_status, cln_enrollment_status, cln_hiv_status, ann_rv_housing_arrangement, ann_rv_insurance_type, and ann_rv_medical_care)

SERVICE records will be matched based on: client, date, subservice. If there is an existing record based on these values it will be updated to match the incoming record. Otherwise, a new record will be added. An existing record will be deleted if it matches an existing one and the is_delete field is set to 'yes'.

REFERRAL records will be matched on: client, date referred, referred-to site. If there is an existing record based on these values it will be updated to match the incoming record. Otherwise, a new record will be added. An existing record will be deleted if it matches an existing one and the is_delete field is set to 'yes'.

DIAGNOSIS records will be matched on: client, date, domain and definition code. If there is an existing record based on these values it will be updated to match the incoming

record. Otherwise, a new record will be added. An existing record will be deleted if it matches an existing one and the is_delete field is set to 'yes'.

MEDICATION records will be matched on: client, medication code, and a date span based on the start and end date of the incoming medication (a medication with no end date is considered to always be active). The import will search for medications whose active dates overlap the date span of the incoming medication record. Any matching records that are found will be treated as the same record and updated accordingly.

PREGNANCY HISTORY records will be matched on: client, domain, and estimated conception date. If there is an existing record with an Estimated Conception date within 30 days of the incoming record, then this will be treated as the same record and updated accordingly.

TEST records will be matched on: client, date, domain and test definition. If there is an existing record based on these values it will be updated to match the incoming record. Otherwise, a new record will be added. An existing record will be deleted if it matches an existing one and the is_delete field is set to 'yes'.

IMMUNIZATION records will be matched on: client, date, domain and definition code. If there is an existing record based on these values it will be updated to match the incoming record. Otherwise, a new record will be added. An existing record will be deleted if it matches an existing one and the is_delete field is set to 'yes'.

II. The File Format

Note that in the bulleted lists the Description/Comments column specifies what codes CAREWare uses for each value. Exporters are not *required* to use these codes, though using them would help to simplify the mapping process. Whatever values are used, it is very important that the exporters coordinate with the central importer to establish what codes will be used for what values and that the same values are consistently used. Failure to do this will result in incorrect data being imported.

NOTE: The state and county fields use designated FIPS codes. The available codes are included in the template file in the tables exp_state_rft and exp_county_rft.

1. exp_provider

Field Name	MS Access Data Type	Size	Req.?	Old Name	Description/Comment
prv_part_a_provided	Yes/No	n/a	Yes*	Title1	Whether or not the provider receives Part A funds.
prv_part_a_prv_id	Text	4	No	Prvid	The Part A provider ID.
prv_part_b_provided	Yes/No	n/a	Yes*	Title2	Whether or not the provider receives Part B funds.
prv_part_b_prv_id	Text	4	No	Prvid	The Part B provider ID.
prv_part_a_grn_id	Text	4	No	Grantid	The Part A grantee ID.
prv_part_b_grn_id	Text	4	No	Grantid	The Part B grantee ID.
prv_part_c_provided	Yes/No	n/a	Yes*	Title3	Whether or not the provider receives Part C funds.
prv_part_c_grn_id	Text	14	No	Grantid	The Part C grantee ID.
prv_part_d_provided	Yes/No	n/a	Yes*	Title4	Whether or not the provider receives Part D funds.
prv_part_d_grn_id	Text	14	No	Grantid	The Part D grantee ID.
prv_name	Text	60	Yes	Prvname1	
prv_street	Text	60	No	Prvaddr1	
prv_city	Text	25	No	Prvcity	
prv_state	Text	2	No	State	Value must be a key from exp_state_rft
prv_zip	Text	9	No	Zip & Zip4	
prv_contact_name	Text	30	No	Contname	
prv_contact_title	Text	30	No	Conttitl	
prv_contact_phone	Text	25	No	Phone	
prv_contact_fax	Text	25	No	Fax	
prv_contact_email	Text	35	No	Email	
prv_qa_rep_name	Text	30	No	-	Name of the provider's quality assurance representative.
prv_qa_rep_email	Text	35	No	-	Email of the provider's quality assurance representative.
prv_taxpayer_id	Text	9	No	Taxid	
prv_provider_type	Text	2	No	Prvtype	Code for: • 01 - Hospital or hospital-based client • 02 - Publicly-funded Community Health Center • 03 - Publicly-funded Community Mental Health Center • 04 - Other Community-based Service Organization (CBO) • 05 - Health Department • 06 - Substance abuse treatment center • 07 - Solo/Group Private

					Medical Practice
					• 08 - Agency Reporting for Multiple Fee-for-Service Providers • 09 - PLWHA coalition • 10 - VA facility • 11 - Other facility • 12 - HL7 Import Provider
prv_ownership_status	Text	2	No	Owner	Code for: • 1 - Public/Local • 2 - Public/State • 3 - Public/Federal • 4 - Private, Non-profit (not faith-based) • 5 - Private, For-profit • 6 - Unincorporated • 7 - Faith-based organization • 8 - Other
prv_num_paid_staff	Single	n/a	No	Paidstaf	Total paid HIV staff in FTEs.
prv_num_volunteers	Single	n/a	No	Volstaff	Total paid volunteer staff in FTEs.
prv_minority_board	Yes/No	n/a	Yes*	RaceBrd	*Yes* if racial/ethnic minority group members make up greater than 50% of your agency's board members.
prv_minority_staff	Yes/No	n/a	Yes*	Racestf	*Yes* if racial/ethnic minority group members make up greater than 50% of your agency's professional staff members in HIV direct services.
prv_minority_clinicians	Yes/No	n/a	Yes*	Racesolo	*Yes* if your agency is a solo or group private health care practice in which greater than 50% of the clinicians are racial/ethnic minority group members.
prv_minority_served	Yes/No	n/a	Yes*	Tradprv	*Yes* if your agency is a traditional provider that has historically served racial/ethnic minority patients/clients but does not meet the criteria in the fields above.

prv_minority_other	Yes/No	n/a	Yes*	Othprv	Yes if your agency does not meet the criteria of any of the four preceding fields.
prv_receives_330_funding	Text	2	No	-	Code for: • 0 – No • 1 – Yes • 9 - Unknown
prv_receives_Mai_funding	Text	2	No	-	Code for: • 0 – No • 1 – Yes • 9 - Unknown
prv_other_provider_type	Text	50	No	-	Allows for specification of what provider type is when other is chosen for prv_provider_type
prv_other_owner_status	Text	50	No	-	Allows for specification of what ownership status is when other is chosen for prv_ownership_status
prv_other_provider_type	Text	50	No	-	Holds the label of the other provider type.
Prv_other_owner_status	Text	50	No	-	Holds the label of the other owner status.

* All Boolean fields are required by CAREWare. Any left null will be interpreted as FALSE.

2. exp_client
Note: an exp_client record must be included for any associated record in the file, even if the client record itself has not changed since the last export.

Field Name	MS Access Data Type	Size	Req.?	Old Name	Description/Comment
cln_pk	Text	38	Yes	PK	Used only for database relations within this file.
cln_eurn	Text	20	No*	Urn	Encrypted URN (usually nine characters). Required if cln_first_name or cln_last_name is blank.
cln_urn_suffix	Text	1	No***		Used to distinguish multiple clients with the same URN.
cln_client_id	Text	16	No	-	The ID that you use to identify clients.
cln_last_name	Text	40	No	Lname	
cln_first_name	Text	25	No	Fname	
cln_middle_name	Text	25	No	Minit	New field holds 25 characters, but initial is acceptable.
cln_street	Text	50	No	-	
cln_city	Text	30	No	-	
cln_state	Text	2	No	-	FIPS code for the state.

cln_county	Text	4	No	-	FIPS code for the county. Must be a valid county code for the given State. If no state is given then this must be null as wel.
cln_zip	Text	9	Yes	Clntzip	Do not code the hyphen.
cln_phone	Text	25	No	-	Use any format.
cln_dob	Date/Time	n/a	Yes	Bmonth, Bday, Byear	Full DOB is required.
cln_gender	Text	1	Yes	Sex	Code for: • 1 - Male • 2 - Female • 3 - Transgender • 6 - Refused to Report • 9 - Unknown
cln_race_white	Yes/No	n/a	Yes*	White	
cln_race_black	Yes/No	n/a	Yes*	Black	
cln_race_asian	Yes/No	n/a	Yes*	Asian	
cln_race_pacific	Yes/No	n/a	Yes*	Pacisl	
cln_race_indian	Yes/No	n/a	Yes*	Natamer	
cln_race_other	Yes/No	n/a	Yes*	Othrace	
cln_race_unknown	Yes/No	n/a	Yes*	unkrace	
cln_hispanic	Text	1	Yes**	Hispanic	Code for: • 0 - No • 1 - Yes • 9 - Unknown
cln_risk_msm	Yes/No	n/a	Yes*	Hivrisk <1-4>	Men who have Sex with Men; now a separate Boolean value.
cln_risk_idu	Yes/No	n/a	Yes*	Hivrisk <1-4>	Intravenous Drug Use; now a separate Boolean value.
cln_risk_hetero	Yes/No	n/a	Yes*	Hivrisk <1-4>	Heterosexual contact; now a separate Boolean value.
cln_risk_hemo	Yes/No	n/a	Yes*	Hivrisk <1-4>	Hemophilia/coagulation disorder; now a separate Boolean value.
cln_risk_perinatal	Yes/No	n/a	Yes*	Hivrisk <1-4>	Perinatal transmission; now a separate Boolean value.
cln_risk_transfusion	Yes/No	n/a	Yes*	Hivrisk <1-4>	Receipt of transfusion of blood, blood components, or tissue; now a separate Boolean value.
cln_risk_other	Yes/No	n/a	Yes*	Hivrisk <1-4>	Now a separate Boolean value.
cln_risk_other_ description	Text	40	No		Description of the "other" risk; now a separate Boolean value.
cln_risk_unknown	Yes/No	n/a	Yes*	Hivrisk <1-4>	Now a separate Boolean value.
cln_vital_status	Text	1	Yes**	Vitalst	Code for: • 1 - Alive • 3 - Deceased • 4 - Unknown Enrollment Status now a separate value.
cln_date_of_death	Date/Time	n/a	No	Dod	
cln_enrollment_	Text	2	Yes**	Vitalst	Code for:

status					• 1 - Active • 2 - Inactive/Case Closed • 9 - Unknown Vital Status now a separate value.
cln_enrollment_date	Date/Time	n/a	No	Enrldate	
cln_date_case_ closed	Date/Time	n/a	No	Enddate	
cln_hiv_status	Text	1	Yes**	Hivstat	Code for: • 1 - HIV-positive (not AIDS) • 2 - HIV-positive (AIDS status unknown), • 3 - CDC defined AIDS, • 4 - HIV-negative (affected), • 5 - HIV-indeterminate, or • 9 - Unknown
cln_hiv_date	Date/Time	n/a	No	-	The date on which the client was diagnosed HIV+.
cln_hiv_date_est	Yes/No	n/a	Yes*	-	*Yes* if the HIV+ date is an estimate.
cln_aids_date	Date/Time	n/a	No	-	The date on which the client was diagnosed with AIDS.
cln_aids_date_est	Yes/No	n/a	Yes*	-	*Yes* if the AIDS date is an estimate.
cln_date_art_first_ prescribed	Date/Time	n/a	No	-	
cln_pre_art_reason	Text	1	No	-	Code for explanation of why client was not prescribed ART after diagnosed with HIV: • 1 - Treatment not medically indicated per guidelines, • 2 - Client not ready (as determined by clinician), • 3 - Client refused therapy, or • 4 - Other extenuating circumstances (e.g. inadequate insurance, ability to pay)
cln_med_allergies	Text	255	No	-	Free text description of any allergies to medications.
cln_notes	Memo	n/a	No	-	

* All Boolean fields are required by CAREWare. Any left null will be interpreted as FALSE.
** CAREWare dropdown lists that specify an Unknown option do not permit null values. Any left null will be interpreted as "Unknown."

*** Null value will default to 'U'

3. exp_annual_review

Field Name	MS Access Data Type	Size	Req. ?	Old Name	Description/Comment
ann_rv_pk	Text	38	Yes	-	Not used by the import process; only useful for user reference.
ann_rv_cln_fk	Text	38	Yes	-	Points to the client record to which this record is related.
ann_rv_year	Text	4	Yes	-	4 digit year to which this annual review applies.
ann_rv_household_ size	Integer	n/a	Yes	Hhsize	1-9999
ann_rv_household_ income	Currency	n/a	Yes	Hhinc	$0.00 - $999,999,999.99
ann_rv_housing_ arrangement	Text	2	Yes*	Nohome	Code for: • 0 - Permanently Housed • 1 - Non-permanently Housed • 2 - Institution • 3 - Other • 9 - Unknown/Unreported
ann_rv_insurance_ type	Text	2	Yes*	Primpay	Code for: • 1 - Private • 2 - Medicare • 3 - Medicaid • 4 - Other public (e.g. Champus, VA) • 5 - No Insurance • 6 - Other • 9 - Unknown
ann_rv_medical_ care	Text	2	Yes*	Primcare	Code for: • 1 - Publicly-funded clinic or health dept. • 2 - Private practice • 3 - Hospital outpatient center • 4 - Emergency Room • 5 - No primary source of care • 8 - Other • 9 - Unknown
ann_rv_q*_ substance_abuse_ history	Text	1	Yes	Subhxq <1-4>	Code for: • 0 - No • 1 - Yes, active history within last 3 months • 2 - Yes, but not active within last 3 months
ann_rv_q*_ substance_abuse_	Text	2	Yes	Subtrq <1-4>	Code for: • 01 - In Treatment

treatment					• 02 - Waiting list for treatment • 03 - Refused Treatment • 04 - Completed Treatment • 05 - Pre-treatment process • 06 - Dropped out of treatment • 07 - No active treatment or counseling • 08 - Other • 88 - Not applicable
ann_rv_q*_mental_ health_history	Text	1	Yes	Mhhxq <1-4>	Code for: • 0 - No • 1 - Yes, active history within last 3 months • 2 - Yes, but not active within last 3 months
ann_rv_q*_mental_ health_treatment	Text	2	Yes	Mhtrq <1-4>	Code for: • 01 - In Treatment • 02 - Waiting list for treatment • 03 - Refused Treatment • 04 - Completed Treatment • 05 - Pre-treatment process • 06 - Dropped out of treatment • 07 - No active treatment or counseling • 08 - Other • 88 - Not applicable
ann_rv_ins_tp_privat e	Yes/No	n/a	No	-	Adds private insurance as other insurance
ann_rv_ins_tp_medi care	Yes/No	n/a	No	-	Adds Medicare insurance as other insurance
ann_rv_ins_tp_medi caid	Yes/No	n/a	No	-	Adds Medicaid insurance as other insurance
ann_rv_ins_tp_other _public	Yes/No	n/a	No	-	Adds Other Public insurance as other insurance
ann_rv_ins_tp_no_in surance	Yes/No	n/a	No	-	Adds No insurance as other insurance.
ann_rv_ins_tp_other	Yes/No	n/a	No	-	Adds Other insurance as other insurance
ann_rv_ins_tp_unkn own	Yes/No	n/a	No	-	Adds Unknown insurance as other insurance
ann_rv_other_insura nce	Text	50	No	-	Allows specification of other insurance if ann_rv_ins_tp_other is chosen

Field Name	MS Access Data Type	Length	Required?		Description/Comment
ann_rv_mental_health_yes_nmi_rfk	Text	2	No	-	Code for: • 0 – No • 1 – Yes • 2 – Not Medically Indicated • 9 - Unknown
ann_rv_sub_abuse_yes_nmi_rfk	Text	2	No	-	Code for: • 0 – No • 1 – Yes • 2 – Not Medically Indicated • 9 - Unknown

* CAREWare dropdown lists that specify an Unknown option do not permit null values. Any left null will be interpreted as "Unknown."

4. exp_service (all fields are new)

Field Name	MS Access Data Type	Length	Required?	Description/Comment
srv_pk	Text	38	Yes	Not used by the import process; only useful for user reference.
srv_cln_fk	Text	38	Yes	Points to the client record to which this record is related.
srv_delete	Yes/No	n/a	Yes*	*Yes* if this record has been deleted at the provider and should be deleted in CAREWare.
srv_subservice	Text	38	Yes	Code for the description of the service provided to the client. The master list is created and maintained by the central administrator.
srv_date	Date/Time	n/a	Yes	
srv_quantity	Single	n/a	Yes**	
srv_price	Currency	n/a	Yes***	Unit price. CAREWare multiplies this times quantity to calculate a total.
srv_subservice_label	Text	38	No	Descriptive label for Service code, primarily used in the CAREWare PDE

* All Boolean fields are required by CAREWare. Any left null will be interpreted as FALSE.
** The quantity field defaults to 1 if no value is supplied.
*** Price defaults to $0 if no values are supplied.

5. exp_referral (all fields are new)

Field Name	MS Access Data Type	Length	Required?	Description/Comment
rfr_pk	Text	38	Yes	Not used by the import process; only useful for user reference.
rfr_delete	Yes/No	n/a	Yes*	*Yes* if this record has been deleted at the provider and should be deleted in CAREWare.

Field Name	MS Access Data Type	Size	Req.?	Description/Comment
rfr_cln_fk	Text	38	Yes	Points to the client record to which this record is related.
rfr_referred_to	Text	38	Yes	Code for the agency to which the referral was made. This field will be used for both internal and external referrals. The master list, which combines internal and external providers, is created and maintained by the central administrator.
rfr_service_category	Text	38	Yes	Code representing a service category as defined by HRSA for the 2007 CADR.
rfr_date_referred	Date/Time	n/a	Yes	The date on which the referral was made.
rfr_status	Text	38	Yes	Code for: • 01 - Pending • 02 - Completed • 03 - Lost to follow up • 04 - Rejected
rfr_date_received	Date/Time	n/a	No	The date on which the referred service was provided.
rfr_class	Text	38	No	Code for a customizable list of referral classes. The master list is created and maintained by the central administrator.
rfr_comment	Text	255	No	Free text that can be used to supply additional information about the referral.

* All Boolean fields are required by CAREWare. Any left null will be interpreted as FALSE.

6. exp_diagnosis

Field Name	MS Access Data Type	Size	Req.?	Description/Comment
dgn_pk	Text	38	Yes	Uniquely identifies each record.
dgn_cln_fk	Text	38	Yes	Points to the client record to which this record is related.
dgn_delete	Yes/No	n/a	Yes*	*Yes* if this record has been deleted at the provider and should be deleted in CAREWare.
dgn_definition_code	Text	38	Yes	Code for the specific diagnosis. The master list is created and maintained by the central administrator.
dgn_assessment	Text	20	No	Code for: • 1 - Definitive • 2 - Presumptive • 3 - Unknown
dgn_date	Date/Time	n/a	Yes	Date the diagnosis was given
dgn_comment	Text	255	No	Free text that can be used to supply additional information about the

Field Name	MS Access Data Type	Size	Req. ?	Description/Comment
				diagnosis.
dgn_definition_name	Text	255	No	Descriptive label for diagnosis code, primarily used in the CAREWare PDE

7. exp_medication

Field Name	MS Access Data Type	Size	Req. ?	Description/Comment
mdc_pk	Text	38	Yes	Uniquely identifies each record.
mdc_cln_fk	Text	38	Yes	Points to the client record to which this record is related.
mdc_delete	Yes/No	n/a	Yes*	*Yes* if this record has been deleted at the provider and should be deleted in CAREWare.
mdc_medication_code	Text	38	Yes	Code for the description of the medication provided. The master list is created and maintained by the Central Administrator.
mdc_units	Single	n/a	No	
mdc_strength	Single	n/a	No	
mdc_frequency	Text	20	No	Code for (See Appendix C for a description of codes): • 01 – qd • 02 – bid • 03 – tid • 04 – qid • 05 – prn • 06 – qw • 07 – biw • 08 – tiw • 09 – qow • 10 – qod • 11 – qh • 12 – qhs • 13 – qm • 14 – q6h • 15 – q12h
mdc_start_date	Date/Time	n/a	Yes	
mdc_end_date	Date/Time	n/a	No	Null for continuing medication.
mdc_indication	Text	20	No	Code for: • 01 – ART • 02 – OI Prophylaxis • 03 – OI Treatment • 99 - Other
mdc_prophylaxis	Text	20	No	Code for: • 01 – Pneumocytis carinii pneumonia (PCP) • 02 – M. avium complex (mac) • 03 – M. tuberclosis (Mtb) • 04 – Candida • 05 – Cytomegalovirus (CMV) • 06 – Toxoplasma gondii

Fieldname	MS Access Data Type	Size	Req.?	Description/Comment
				• 07 – Varicella zoster virus (VZV) • 08 - Other
mdc_discontinue_reason	Text	20	No	Code for: • 01 – Virologic Failure • 02 – toxicity • 03 – Intolerance • 04 – Lost to Followup • 05 – Dose change • 06 – Other • 07 – Unknown • 08 – Improved immune function • 10 - Stock out/supply disruption • 11 – Managed treatment interruption • 12 – non-adherent • 13 – Immunologic failure • 14 – Pregnant • 15 – Risk of pregnancy • 16 – Newly diagnosed TB • 17 – Availability of new drug • 18 – illness or hospitalization • 19 – Patient lacks sufficient financial resources • 20 – Patient decision
mdc_comment	Text	255	No	Free text that can be used to supply additional information about the medication.
mdc_medication_label	Text	50	No	Descriptive label for medication code, primarily used in the CAREWare PDE.

8. exp_pregnancy

Fieldname	MS Access Data Type	Size	Req.?	Description/Comment
prg_pk	Text	38	Yes	Not used by the import process; only useful for user reference.
prg_cln_fk	Text	38	Yes	Points to the client record to which this record is related.
prg_delete	Yes/No	n/a	Yes*	Yes if this record should be deleted.
prg_est_conception_date	Date/Time	n/a	Yes	Estimated date of conception.
prg_pn_care_date	Date/Time	n/a	No	Date prenatal care began for this pregnancy.
prg_pn_visits	Integer	n/a	No	Number of prenatal visits during this pregnancy.
prg_pn_art_counsel	Text	20	No	Was client counseled for ART? Code for: • 0 - No

Field Name	MS Access Data Type	Size	Req.?	Description/Comment
				• 1 - yes • 9 - Unknown
prg_pn_art_offered	Text	20	No	Was ART offered to the client? Code for: • 0 - No • 1 – yes • 9 - Unknown
prg_pn_art_taken	Text	20	No	Was ART taken? Code for: • 0 - No • 1 – yes • 9 - Unknown
prg_pn_art_date	Date/Time	n/a	No	Date ART was started. Should only have a value if prg_pn_art_taken = 'yes'
prg_outcome	Text	20	No	Code for: • 01 – Live Birth • 02 – Therapeutic (induced) abortion • 03 – Spontaneous abortion (miscarriage) • 04 – Stillbirth • 05 - Unknown
prg_delivery_date	Date/Time	n/a	No	
prg_newborn_status	Text	20	No	HIV Status of newborn. Code for: • 0 – Negative • 1 – Positive • 2 – Indeterminate • 9 – Unknown/unreported

9. exp_test

Field Name	MS Access Data Type	Size	Req.?	Description/Comment
tst_pk	Text	38	Yes	Uniquely identifies each record.
tst_cln_fk	Text	38	Yes	Points to the client record to which this record is related.
tst_delete	Yes/No	n/a	No	*Yes* if this record has been deleted at the provider and should be deleted in CAREWare.
tst_test_definition_code	Text	20	Yes	Code for the specific type of test. The master list is created and maintained by the central administrator.
tst_date	Date/Time	n/a	Yes	Date of the test. (This is usually the date the specimen was collected)
tst_comment	Text	255	No	Free text that can be used to supply additional information about the test.
tst_result	Text	28	Yes	Code for a qualitative test result. This is a customizable list of result codes. Note: if an operator is included in the result, it is expected to be one of the following: Acceptable values are:

				• "<" • "<=" • "=" • ">=" • ">"
tst_titer	Text	10	No	Include if the test produces a titer result.
tst_test_definition_label	Text	50	No	Descriptive label for Test code, primarily used in the CAREWare PDE.

10. exp_immunization

Field Name	MS Access Data Type	Size	Req.?	Description/Comment
imm_pk	Text	38	Yes	Uniquely identifies each record.
imm_cln_fk	Text	38	Yes	Points to the client record to which this record is related.
imm_delete	Yes/No	n/a	Yes*	*Yes* if this record has been deleted at the provider and should be deleted in CAREWare.
imm_definition_code	Text	38	Yes	Code for the specific diagnosis. The master list is created and maintained by the central administrator.
imm_received_code	Text	20	Yes	Determines whether the immunization was given. CAREWare values: • 1 - Yes • 2 - NMI • 3 - No • 4 - Refused
imm_date	Date/Time	n/a	Yes	Date the immunization was given
imm_immunity_code	Text	20	No	Code for any immunity: • 01 - Immune • 02 - Nonimmune • 03 - History of infection • 04 - History of vaccination • 99 - Unknown
Imm_label	Text	50	No	Identifying label

* All Boolean fields are required by CAREWare. Any left null will be interpreted as FALSE.

Appendix A: Creating an encrypted URN (EURN)

CAREWare uses the URN32.dll (a standard Windows 32 bit dll that needs to be installed in the Windows system folder) to encrypt a client's URN and create a value for EURN. Here is some sample VB.NET code for how to use this dll to create an EURN:

```
' ## This code is part of CAREWare and is copyright, Jeff Murray's Programming Shop, Inc. (jProg).
' ## It is protected under US and international copyright laws and is provided only as a
' ## supplement to jProg's CAREWare. This code is provided as is without warranty of any kind,
' ## either express or implied, including but not limited to implied warranties of fitness for a
' ## particular purpose or merchantability.
' ## By providing this code, jProg grants a limited, nonexclusive license to distribute or modify
' ## this code solely for use in connection with CAREWare. This code is not to be used, modified,
' ## or distributed for any purpose other than to facilitate the use of CAREWare pursuant to a
' ## duly issued CAREWare license.

' ##MODULE_SUMMARY This object exposes a shared function that encrypts URNs.
Public Class jURNEncryption

'URN32.DLL has an function called MDString.
'You pass it string containing the URN and it returns
'the encrypted value
Declare Sub MDString Lib "URN32.DLL" (ByVal UURN As String)

' ## Encrypt the supplied URN.
' ##PARAM URN URN to encrypt.
' ##RETURNS Encrypted URN.
Public Shared Function EncryptURN(ByVal URN As String) As String

'Declare a string to send
Dim EncryptedURN As String

'If the URN ends in a U, trim the U for backward
'compatibility with other systems that don't use the U
'note: the U stands for Unique and was added with CW 4.0
If URN.Substring(URN.Length - 1, 1) = "U" Then
EncryptedURN = URN.Substring(0, 11)
Else
'If the last character is other than a U, then
'we can't be bacwards compatible or it would cause
'a duplicate
EncryptedURN = URN
End If

'Call MDString in URN32.DLL
MDString(EncryptedURN)

'The original specification called for it to me no longer than
'9 characters, but sometimes it gets liberal with that
Return Left(EncryptedURN, 9)

End Function

End Class
```

Appendix B: Using the template mdb to create Encrypted URNs (EURN) for clients

If an exporter desires to exclude client names from the export this is allowed, but then each client MUST have a value for the EURN field. This can be done programmatically (see Appendix A) or from within the template mdb file. Exporters can use this functionality to generate the EURNs and then remove the client names before sending the export file.

In order to use the Template file to create the EURNs, the following criteria must be met:
- ✓ The computer must have the file URN32.dll in the appropriate Windows system folder (for example, in Windows XP it should be in C:\WINDOWS\system32).
- ✓ The CAREWare values for gender must be used for the column cln_gender:
  - ▪ 1 – Male
  - ▪ 2 – Female
  - ▪ 3 – Transgender
  - ▪ 6 – Refused to Report
  - ▪ 9 – Unknown
- ✓ Note also that this functionality assumes the values for date of birth (cln_dob) are dates in the format mm/dd/yyyy.

Once these are met, to use the functionality:
1) Populate the client records with all information, including the URN-related fields in the client records (First Name, Last Name, Gender and DOB).
2) From inside the template press Ctrl-E to execute the macro that will create the EURN values for all clients. Note that if a client is missing any of the 4 fields that are used to create the EURN, the EURN will be left blank and this client record will be logged as an error during the export.
3) Once the EURNs are created, the exporter has the option of removing the first and last names of the clients. There is a macro built into the template that will automatically delete the first and last name for all clients – just press Ctrl-D to clear out those fields from within the database.

The export file will now have correct EURN values for the clients. Remember that DOB and Gender are always required.

Appendix C: Medication Frequency Codes

Frequency	Multiplier *	Description
qd	1	Every day (*quaque die*)
bid	2	Twice a day (*bis in die*)
tid	3	Three times a day (*ter in die*)
qid	4	Four times a day (*quater in die*)
prn	<none>	As Necessary (*pro re nata*)
qw	0.1428571	Once a Week (q = *quaque*)
biw	0.2857143	Biweekly
tiw	0.4285714	Three Times in a Week
qow	0.0714285	Every Other Week

qod	0.5	Every Other Day
qh	24	Every Hour (*quaque hora*)
qhs	1	Every Bedtime (*quaque hora somni*)
qm	1	Every Morning
q6h	4	Every 6 Hours
q12h	2	Every 12 Hours

* the Multiplier is a translation of the frequency into a number that indicates times per day