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CACR Registry Patient File Upload (CSV)

Version 0.3 (draft) – August 6, 2008
Modified – IntakeDischargeSmoking – Added Variables.

Version 0.4 (draft) – August 18, 2008
Added - IntakeDischargePsychoSocial Section
Modified – IntakeDischargeMsmt – removed PyschoSocial variables
Added – IntakeDischargeMedication Section

The primary form of entering data into the CACR Registry is electronic transfer of data from another electronic data management system. This document outlines the creation of a CSV (comma separated value) formatted file that is compatible with the registry.

Current upload mechanisms for CSV files are secure FTP and manual upload in the program.

Please refer to the current version of the minimum dataset (MDS) for allowable values and further description of fields.

[xxxxx] – An item surrounded by square brackets indicates that the item including brackets must be replaced by a value.

Changing Data:
	The system supports incomplete patient data. Multiple uploads may be performed during the patients progress throughout the CR Program. Also, data elements may be updated/corrected/removed through later uploads.

- Updating Data
  - If a value is present in a field, it will be updated.
- Removing Data
  - If a single space is in the field, the value will be removed.
- Leaving Data alone
  - If a blank value (no space) is in the field, the data will NOT be changed.

Errors:
	The system will automatically indentify and report back any problems with the file. A report can be viewed in the main program window.

File Name

The formatting of the file name is very important for the system to recognize and validate the source of the information, as well as uniquely identifying the file. The date/time stamp should be unique to ease identification of the file if any problems occur.

File Type is of .csv.

[SourceID]_[YYYY][MM][DD][HH][mm].csv

Source ID
       Identification of Data Source
All file interaction with the CACR website will be prefixed with this value to identify the source of information being provided. This integer value will be provided to the end user upon registration with the CACR.

YYYY
       Year Date Stamp of File
This portion of data is formatted as YYYY and represents the year the data file was created.

MM
       Month Date Stamp of File
This portion of data is formatted as MM and represents the month the data file was created.

DD
       Day Date Stamp of File
This portion of data is formatted as DD and represents the month-date the data file was created.

HH
       Hour Date Stamp of File
This portion of data is formatted as HH and represents the hour (24hr format) the data file was created.

mm
       Minute Date Stamp of File
This portion of data is formatted as mm and represents the minute the data file was created.

Example: 5_200801221654.csv

Data Fields

Demographics

Single row per patient file, describes the patient.

DEMO,[Source ID],[Source Unique ID],[Medicare Number],[Hospital Code],[Gender],[DOB],[Postal Code],[ConsentID]

Source ID
    As described above.

Source Unique ID
    This is an id generated by the data source to uniquely identify their patient. This field does NOT necessarily have to be unique to any other ID used in the system but must be unique to the source. If the patient had multiple Cardiac Rehab encounters, this ID must be unique between encounters.

Medicare Number
    The patients' provincial health insurance/medicare number.

Hospital Code
    The patient's hospital ID, like a Clinical Record Number or Medical Record Number.

Gender (integer)
    The patients gender. See MDS.

DOB (YYYYMMDD)
    Date of Birth of the patient in YYYYMMDD format.

Postal Code
    Patients postal code for statistical and research purposes

Consent ID (Integer)
    Identification of whether or not patient has provided consent.

Example: demo,5,cr125,1234567890,0123456,1,19700120,K7M8V5,2

Socio Economic Data

Single row per patient file, describes the socio economic status of a patient.

SOCIO,[SourceID],[SourceUniqueID],[Language Spoken],[Ethnicity],[Education Highest Level Achieved],[Marital Status],[Residence],[Family Support],[Travel Time to Rehab]

SourceID
> As described above.

SourceUniqueID
> As described above.

Language Spoken (Integer)
> Identification number corresponding to preferred language of correspondence and contact.

Ethnicity (Integer)
> Identification number corresponding to ethnicity.

Education Highest Level Achieved (Integer)
> Identification number corresponding to highest education level.

Marital Status (Integer)
> Identification number corresponding to marital status.

Residence (Integer)
> Identification number corresponding to residence type.

Family Support (Integer)
> Identification number corresponding to family situation (i.e. lives alone etc.).

Travel Time to Rehab (Integer)
> Identification number corresponding to approximate travel time to rehabilitation facility.

Example: socio,5,cr568,1,2,3,1,1,2,2

Referral Events

Multiple rows per patient file, describes the many referral events of a patient.

REFERRAL,[sourceID],[sourceUniqueID],[Referral Event ID],[Referral Event Date]

SourceID
> As described above.

SourceUniqueID
> As described above.

Referral Event ID (Integer)
> Identification number corresponding to the type of referral event.

Referral Event Date (YYYYMMDD)
> Date of the referral event.

Example: **referral**,5,cr568,5,20080105

CRProgram/WaitTime Data

Single row per patient file, describes the key variables and dates regarding the cardiac rehab program.

WAITTIME,[sourceID],[sourceUniqueID],[Referral Date],[Referral Receipt Date],[Referral Location],[Automatic Referral],[Intake Visit Date],[Program Admission Date],[Clinic Exit Date],[Scheduled Exercise Number],[Attended Exercise Number],[Discharge Date],[CR Program Completion],[Work Return Date]

SourceID
> As described above.

SourceUniqueID
> As described above.

Referral Date (YYYYMMDD)
> Date when the referral was made.

Referral Receipt Date (YYYYMMDD)
> Date when the referral was received.

Referral Location (Integer)

Identification number corresponding to where the referral came from.

Automatic Referral (Integer)
    ID number corresponding to whether or not referral was automatic. (i.e. 0=unknown,1=yes,2=no)

Intake Visit Date (YYYYMMDD)
    Date of intake visit.

Program Admission Date (YYYYMMDD)
    Date of admission to program.

Clinic Exit Date (YYYYMMDD)
    Date when the patient exited the clinic.

Scheduled Exercise Number (Integer)
    Number of exercises scheduled.

Attended Exercise Number (Integer)
    Number of exercises actually attended.

Discharge Date (YYYYMMDD)
    Date when the patient was discharged.

CR Program Completion (Integer)
    Identification number corresponding to whether patient completed the cardiac rehab program.

Work Return Date (YYYYMMDD)
    Date when the patient returned to work.

Example:
waittime,5,cr568,20080108,20080110,1,1,20080112,20080113,20080201,10,5,20080202,1,20080301

Termination

Multiple rows per patient file, describes the reasons for program termination.

TERMINATION,[sourceID],[sourceUniqueID],[Termination Date],[Termination Type]

SourceID
    As described above.

SourceUniqueID
    As described above.

Termination Date (YYYYMMDD)
      Date of the item that caused program termination.

Termination Type (Integer)
      Identification number corresponding to termination type

Example: termination,5,cr568,20080505,2

Interim Events

Multiple rows per patient file, describes the events that occurred during the program.

interim,[sourceID],[sourceUniqueID],[Interim Event Date],[Interim Event Type]

SourceID
      As described above.

SourceUniqueID
      As described above.

Interim Event Date (YYYYMMDD)
      Date when the event took place.

Interim Event Type (Integer)
      Identification number corresponding to the type of event.

Example: interim,5,cr568,20081231,1

Risk Factors

Single row per patient file, describes the risk factors of a patient.

riskfactors,[sourceID],[sourceUniqueID],[SendentaryLifestyle],[HyperLipidemia],[Hypertension],[Smoking]
,[Family History of CAD],[Diabetes],[Diabetes Type]

SourceID
      As described above.

SourceUniqueID
      As described above.

Sendentary Lifestyle (Integer)
      Identification number for the presence of Sendentary Lifestyle.

HyperLipidemia (Integer)
    Identification number for the presence of Hyperlipidemia.

Hypertension (Integer)
    Identification number for the presence of Hypertension.

Smoking (Integer)
    Identification number for the smoking status.

Family History of CAD (Integer)
    Identification number for the presence of history of CAD.

Diabetes (Integer)
    Identification number for the presence of Diabetes.

Diabetes Type (Integer)
    Identification number which represents type of diabetes present.

Example: riskfactors,5,cr568,1,1,1,1,1,1,1

Service Referrals

Single row per patient file, which describes the types of service referrals made.

serviceref,[sourceID],[sourceUniqueID],[Onsite Exercise Training Once Per Week],[Onsite Exercise Training Twice Per Week], [Onsite Exercise Training Three Times Per Week], [Exercise Training Offsite], [Nutrition 1:11 Counselling],[Smoking Cessation],[Referral to Smoking Cessation Program],[Stress Management]

SourceID
    Same as above.

SourceUniqueID
    Same as above.

Onsite Exercise Training Once Per Week (Integer)
    Identification number representing whether or not service offered.

Onsite Exercise Training Twice Per Week (Integer)
    Identification number representing whether or not service offered.

Onsite Exercise Training Three Times Per Week (Integer)
    Identification number representing whether or not service offered.

Exercise Training Offsite ID (Integer)
        Identification number representing whether or not service offered.

Nutrition 1:11 Counselling (Integer)
        Identification number representing whether or not service offered.

Smoking Cessation (Integer)
        Identification number representing whether or not service offered.

Referral to Smoking Cessation Program (Integer)
        Identification number representing whether or not service offered.

Stress Management (Integer)
        Identification number representing whether or not service offered.

Example: serviceref,5,cr568,1,2,1,2,1,2,1,2

Intake/Discharge Measurements

Two rows per patient file, one for intake and one for discharge, each describing the measurements taken.

IntakeMsmt/DischargeMsmt,[sourceID],[sourceUniqueID],[CCSAngina],[NYHAClass],[LVFunction],[FBS],[HbA1c],[TC],[TG],[HDLC],[LDLC],[TCHDL],[SerumCreatinine],[MicroAlbuminuria],[Weight],[Height],[Waist],[Hip],[SBP],[DBP],[Pulse Rate]

Source ID
        As described above.

SourceUniqueID
        As described above.

CCSAngina (Integer)
        Identification number describing CCS Angina.

NYHA Class (Integer)
        Identification number describing NYHA Class.

LVFunction (Integer)
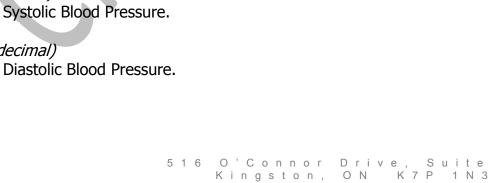   Identification number describing LV Function.

FBS (decimal)
        Fasting Blood Sugar.

HbA1c (decimal)
> HbA1c.

TC (decimal)
> Decimal value.

TG (decimal)
> TG.

HDLC (decimal)
> HDL-C.

LDLC (decimal)
> LCL-C.

TCHDL (decimal)
> TC/HDL.

SerumCreatinine (decimal)
> Serum Creatinine.

MicroAlbuminuria (decimal)
> Microalbuminuria.

Weight (decimal)
> Weight.

Height (decimal)
> Height.

Waist (decimal)
> Waist measurement.

Hip (decimal)
> Hip measurement in centimeters.

SBP (decimal)
> Systolic Blood Pressure.

DBP (decimal)
> Diastolic Blood Pressure.

Pulse Rate (decimal)
    Pulse Rate.

Example: IntakeMsmt,5,cr568,1,2,1,0.1,0.2,0.3,0.4,0.5,0.6,0.7,0.8,0.9,85.5,1.88,90.5,10.5,5.5,1.5,105.5
DischargeMsmt,5,cr568,1,2,1,0.1,0.2,0.3,0.4,0.5,0.6,0.7,0.8,0.9,85.5,1.88,90.5,10.5,5.5,1.5,105.5

<u>Intake/Discharge Stress Test</u>

Two rows per patient file, one for intake and one for discharge, each describing the stress test.

INTAKESTRESSTEST/DISCHARGESTRESSTEST,[sourceID],[sourceUniqueID],[Stress Test Location],
[Stress Test Date],[Resting SBP],[Peak SBP],[Resting DBP],[Peak DBP],[Resting HR],[Peak HR],[GXT
Protocol],[Exercise Time],[Reason for Termination],[Max Cardio Resp Effort], [Ischemia],[Angina],[Borg-10
Scale],[Borg-15 Scale],[Max ST Depression] ,[Peak METs],[Duke Treadmill Score],[Max Cardio Resp
Effort],[Mets Directly Measured],[REP Max]

Source ID
    As described above.

SourceUniqueID
    As described above.

Stress Test Location (Integer)
    Identification number of stress test location

Stress Test Date (YYYYMMDD)
    Date of Stress test.

Resting SBP (decimal)
    Resting Systolic Blood Pressure.

Peak SBP (decimal)
    Peak Systolic Blood Pressure.

Resting DBP (decimal)
    Resting Diastolic Blood Pressure.

Peak DBP (decimal)
    Peak diastolic blood pressure.

Resting HR (decimal)
    Resting heart rate.

Peak HR (decimal)
> Peak heart rate.

GXT Protocol (Integer)
> Identification number representing GXT Protocol.

Exercise Time (Integer)
> Integer value of exercise time.

Reason for Termination (Integer)
> Identification number representing reason for termination

Ischemia (Integer)
> Identification number representing presence of Ischemia

Angina (Integer)
> Identification number representing presence of Angina

Borg-10 Scale (Integer)
> Integer value given for Borg-10 scale.

Borg-15 Scale (Integer)
> Integer value given for Borg-15 scale.

Max ST Depression (Integer)
> Integer value for Maximum ST Depression.

Peak METs (Integer)
> Integer value for Peak METs.

Duke Treadmill Score (Integer)
> Integer value for Duke Treadmill Score.

Rep Max (Integer)
> Integer value for the maximum number of reps.

Max Cardio Resp Effort (Integer)
> Identification number representing whether maximal Cardio-Respiratory Effort was reached.

Mets Directly Measured (Integer)
> Identification number representing whether Mets were directly measured.

Example:
DISCHARGESTRESSTEST,5,cr568,1,20080101,0.11,0.21,0.31,0.41,0.5,0.61,2,3,2,3,1,2,3,1,2,3,1,2,3

Intake/Discharge PsychoSocial

Two rows per patient file, one for intake and one for discharge, each describing patients psychosocial testing.

INTAKEPSYCHOSOCIAL/DISCHARGEPSYCHOSOCIAL,[sourceID],[sourceUniqueID],[luAnxietyMeasure
PerformedID],[AnxietyMeasureScore],[luAnxietyCutoffID],[luAnxietyMeasureID],[luDepressionMeasurePerfor
medID],[DepressionMeasureScore],[luDepressionCutoffID],[luDepressionMeasureID],[luQOLPhysicalPerform
edID],[QOLPhysicalScore],[luQOLPhysicalMeasureID],[luQOLMentalPerformedID],[QOLMentalScore],[luQOL
MentalMeasureID],[luQOLOtherPerformedID],[QOLOtherScore],[luQOLOtherMeasureID]
Source ID
>   As described above.

SourceUniqueID
>   As described above.

luAnxietyMeasurePerformeID (Integer)
>   Identification number (TriState) representing if if the Anxiety Measure was Performed.

AnxietyMeasureScore (Decimal)
>   Decimal number representing the score of the anxiety measure.

luAnxietyCutoffID (Integer)
>   Identification number (TriState) representing if the person is at or above the cutoff for anxiety.

luAnxietyMeasureID (Integer)
>   Identification number representing the anxiety measure used.

luDepressionMeasurePerformeID (Integer)
>   Identification number (TriState) representing if if the Depression Measure was Performed.

DepressionMeasureScore (Decimal)
>   Decimal number representing the score of the Depression measure.

luDepressionCutoffID (Integer)
>   Identification number (TriState) representing if the person is at or above the cutoff for Depression.

luDepressionMeasureID (Integer)
>   Identification number representing the Depression measure used.

luQOLPhysicalPerformeID (Integer)
    Identification number (TriState) representing if if the QOL Physical was Performed.

QOLPhysicalScore (Decimal)
    Decimal number representing the score of the QOL Physical.

luQOLPhysicalMeasureID (Integer)
    Identification number representing the QOL Physical measure used.

luQOLMentalPerformeID (Integer)
    Identification number (TriState) representing if if the QOL Mental was Performed.

QOLMentalScore (Decimal)
    Decimal number representing the score of the QOL Mental.

luQOLMentalMeasureID (Integer)
    Identification number representing the QOL Mental measure used.

luQOLOtherPerformeID (Integer)
    Identification number (TriState) representing if if the QOL Other was Performed.

QOLOtherScore (Decimal)
    Decimal number representing the score of the QOL Other.

luQOLOtherMeasureID (Integer)
    Identification number representing the QOL Other measure used.

Example: INTAKEPSYCHOSOCIAL,5,cr568,1,4,2,3,1,4,2,3,1,3.0,4,1,3.0,4,1,3.0,4,

Intake/Discharge Occupation

Two rows per patient file, one for intake and one for discharge, each describing patients occupation.

INTAKEOCCUPATION/DISCHARGEOCCUPATION,[sourceID],[sourceUniqueID],[Occupation],[Employment Status],[Desired Occupation Status],[Desired Occupation Status Achieved]

Source ID
    As described above.

SourceUniqueID
    As described above.

Occupation (Integer)
> Identification number representing occupation.

Employment Status (Integer)
> Identification number representing employment status.

Desired Occupation Status (Integer)
> Identification number representing desired occupation status.
> **NOTE: Only applicable for intake.**

Desired Occupation Status Achieved (Integer)
> Identification number representing whether or not the desired status was achieved.
> **NOTE: Only applicable for discharge.**

Example: INTAKEOCCUPATION,5,cr568,1,1,1,0

Intake/Discharge Smoking

Two rows per patient file, one for intake and one for discharge, each describing patients smoking status.

INTAKESMOKING/DISCHARGESMOKING,[sourceID],[sourceUniqueID],[Smoking Present Status],[Last Smoke Date], [Last Smoke Date NA], [Smoke Daily], [Smoke Daily NA], [Smoke Start Age], [Smoke Start Age NA], [Smoking Amount],[Smoking Amount NA],[CO Level], [CO Level Measuring Device]

Source ID
> As described above.

SourceUniqueID
> As described above.

Smoking Present Status (Integer)
> Identification number representing the present smoking status.

Last Smoke Date (YYYYMMDD)
> Last date patient smoked.

Last Smoke Date NA (Boolean)
> Bit value set if patient is non smoker.

Smoke Daily *(Integer)*
> Identification number representing if the patient smoked cigarettes daily.

Smoke Daily *NA (Boolean)*
>Bit value set if patient is non smoker.

Smoke Start Age *(Integer)*
>Integer number representing the age the patient started smoking daily.

Smoke Start Age *(Boolean)*
>Bit value set if patient is non smoker.

Smoking Amount (Integer)
>Integer number representing the amount of cigarettes smoked per day.

Smoking Amount NA (Boolean)
>Bit value set if patient is non smoker.

CO Level (decimal)
>Decimal number representing the CO Level.

CO Level Measuring Device (string)
>String representing the CO Level Measuring Device.

Example: DISCHARGESMOKING,5,cr568,1,20051231,0, 1,0,25,0,10,0,30,Bedfont Smokerlyzer IV

Intake/Discharge Medication

Two rows per patient file, one for intake and one for discharge, each describing patients medications.

INTAKEMEDICATION/DISCHARGEMEDICATION,[sourceID],[sourceUniqueID],[luMedNameID],[luMedTypeID],[luContraIndicatedID],[Dose], [luMedUnitID],[Frequency],[luMedFreqID]

Source ID
> As described above.

SourceUniqueID
> As described above.

luMedNameID (Integer)
> Identification number representing the name of Medication.

luMedTypeID (Integer)
> Identification number representing the type of Medication.
> **NOTE: DISABLED FOR THIS STAGE OF THE REGISTRY. ALWAYS SEND A ZERO (0).**

Dose (decimal)
> Decimal representing the dosage amount.

luMedUnitID (Integer)
> Identification number representing the unit of the dosage.

Frequency (decimal)
> Decimal representing the frequency amount.

luMedFreqID (Integer)
> Identification number representing the frequency.

Example: INTAKEMEDICATION,5,cr568,89,0,5,1,0,2

Appendix A – Sample CSV file

```
DEMO,5,cr568,1111222333,0123456,19850315,K7MA3D,1
SOCIO,5,cr568,1,2,3,1,1,2,2
REFERRAL,5,cr568,5,200801051205
WAITTIME,5,cr568,20080108,20080110,1,1,20080112,20080113,20080201,10,5,20080202,1,20080301
TERMINATION,5,cr568,20080505,2
INTERIM,5,cr568,20081231,1
RISKFACTORS,5,cr568,1,1,1,1,1,1,1
SERVICEREF,5,cr568,1,2,1,2,1,2,1,2
INTAKEMSMT,5,cr568,1,2,1,0.1,0.2,0.3,0.4,0.5,0.6,0.7,0.8,0.9,85.5,1.88,90.5,10.5,5.5,1.5,105.5,1,2,3
DISCHARGEMSMT,5,cr568,2,2,2,0.1,0.2,0.3,0.4,0.5,0.6,0.7,0.8,0.9,80.5,1.85,85.5,11.5,5.5,1.5,105.5
DISCHARGESTRESSTEST,5,cr568,1,20080101,0.11,0.21,0.31,0.41,0.5,0.61,2,3,2,3,1,2,3,1,2,3,1,2,3
INTAKEOCCUPATION,5,cr568,1,1,1,0
DISCHARGEOCCUPATION,5,cr568,2,2,2,1
INTAKESMOKING,5,cr568,1,10,1,19991231,0
DISCHARGESMOKING,5,cr568,1,5,0,20051231,1
```