

Cardiology Report Generator (CRG), V2.0

Cardiology Report Generator allows the rapid and accurate creation of cardiology stress test reports

I. Prior To Installation

- a. System Requirements
 - i. Windows 95 or greater
 - ii. Screen size should be at least 1024 x 768
 - iii. Microsoft Word 2000 / Office 2000 with SR 1a or more
To obtain update or check if you need it go to site:
<http://office.microsoft.com> and click on
Product Updates and select SR-1a
 - iv. See Troubleshooting (VI) for specific Operating System Fixes

II. Installation Instruction & Networking

- a. Run Setup.exe on CD
 - i. Normal installation may require the computer to reboot two times.
- b. Run CRG and find Registration Key
 - i. Email the registration key with your name, address, phone number, and email address to info@cardiacimage.com
Within 24 to 48 hours you should receive the registration code, specific for that computer running the program. Both the Key and Code are *case sensitive*
 - ii. Alternatively, press *DEMO* for a 30 day trial. At any time, you can register by entering the *SETTINGS* page and selecting *REGISTER*.
- c. Configuring a Network
 - i. Install CRG on Each Computer
 - ii. On every computer, enter the Settings function and select the appropriate directory to hold the collective database and reports folder
 - iii. For SQL Server Conversion and WAN, contact info@cardiacimage.com

III. Generating a Report

- a. Under Files Menu select Nuclear, Stress Echo, or PET Reports
- b. Start Menu
 - i. The *Look-up* button generates a list of all saved reports.
 - ii. When the *Dates, Location, or Physician* boxes is (are) checked it selects reports meeting those criteria.
 - iii. *Edit* or *Double Click* loads the selected report for editing and completion
 - iv. *New* begins a new report

- v. *Print* prints a single copy of the selected report to the default printer.
 - vi. *Print...* allows printing of multiple copies
 - vii. *Fax* is disabled on the DEMO version and requires WinFax™
 - viii. *Exit* stops CRG
 - ix. *Settings* is used to reset the folders and alter certain options
 - x. Within the reports box, clicking on *Last Name*, *Date*, *Completed*, or *Date* re-sorts the list accordingly
 - xi. *LOCATION* – allows viewing reports from one of many pre-defined locations. This is useful when CRG is networked over a WAN
- c. Report Generation Command Buttons
- i. *Save & Exit* – saves the current information and exits for future completion. Note the first and last name, date of birth, referring MD, gender, and referring MD all must be entered
 - ii. *Complete* – saves the current information, generates the report, and allows the selection of a completing physicians name to appear at the end of the report. If you want the report printed without a name, enter *Exit* on the completing physician screen
 - 1. *Add* will add a physician's name to the list of those allowed to sign reports
 - 2. *Del* removes the selected physician from the list
 - 3. *Select* selects the highlighted physician
 - iii. *Exit* – exits without saving anything
- d. Report Generation Main Page
- i. *Lookup* searches the database for patients who had previous studies. When they are found, the dates of previous studies are listed. Selected a previous study, shows the referring physicians for that study. *Update* uses the selected information in the current report.
 - ii. Enter the birth date as MM/DD/YY or MM/DD/YYYY, age is calculated
 - iii. When returning to a previously started report, use *Change* button to alter demographic information
 - iv. At least one *Referring MD* must be selected for every study.
 - 1. When a new last name is entered you are prompted for a first name and fax number (optional). The new names are added to the database and will be available next time.
 - 2. The *Add* button can be used to add a different physician with the same last name
 - v. *Exercise* – when treadmill exercise is used (default)
 - vi. *Pharmacologic* – select Adenosine or Dipyridamole
The Adenosine Infusion time can be changed on the Settings Page.
 - vii. *Stress & Rest*
 - 1. Select *Dual-Isotope* for Rest Thallium – Rest Sestamibi (default is 3.5 / 30 mCi)

2. Select *Same Day* for Rest Mibi – Stress Mibi (default 10/30 mCi)
3. Select *Two Day* for Stress – Rest Sestamibi (default 30/30 mCi)

The Radiopharmaceutical (eg. MIBI vs. Myoview, etc..) can be changed on the Settings Page.

- viii. *Stress Only* – when rest images are not obtained
 - ix. *No Imaging* – generates a treadmill stress test
 - x. *No Gated* – when Gated SPECT is not obtained
 - xi. *Normal* – generates a Normal nuclear report (use after stress information is entered)
- e. **HISTORY PAGE**
- i. *Indications* can be selected from the drop-down list or entered
 - ii. *Medications* – is not printed out in the reports but the information is saved with the data
 - iii. *Pertinent History* check box – if there is any pertinent history, check this box and select risk factors from the dropdown list or type them in
 - iv. *Baseline ECG* – if the baseline ECG is abnormal in any way, check this box and use the menu to build the abnormalities. Make sure to enter *BUILD* to compile your ECG interpretation. You can type more in the text box
- f. **STRESS TEST**
- i. For treadmill tests, make sure to enter the METS of exercise
 - ii. Time should be entered as MM:SS
 - iii. *ChestPain Box* – If chest pain is experienced, check this box and type any qualifiers in the text field.
 - iv. *Arrhythmias* – If significant arrhythmias occur, press the button for each type and select from the menu. Use the *BUILD* button to generate the text. Make sure to enter the period of the test when they occur (eg. Exercise or Recovery)
 - v. *ECG Changes* – If ECG changes are detected, check this box and use the menus to build the findings. Make sure to press the *BUILD* button to generate the text. Again, you can edit it in the text field after it is built.
 - vi. During pharmacologic stress, use MAX to denote the peak (highest or lowest) blood pressure during peak effect.
- g. **FINDINGS**
- i. Check appropriate boxes if there is *LV Dilatation*, *Stress-Induced Dilatation*, or *RV Dilatation*
 - ii. *ADD DEFECTS* if there are stress perfusion defects.
 1. Select *Degree*, *Segment*, and *Region* as appropriate to describe a region of hypoperfusion.
 2. Only a single *Degree* can be selected for each entry but multiple *Regions* are allowed.

3. To describe multiple defects of differing severities, just press *ADD DEFECTS* each time
4. *BREAST* and *DIAPHGRAGM* default to certain segments of characteristic defects
- iii. Enter stress and rest doses in boxes if different than 30 / 10.
- iv. Describe any changes on rest images.
- h. **CONCLUSIONS**
 - i. Select results for stress and imaging portions
 - ii. Select Ischemic Zones and Infarct zones using segment selection and appropriate modifiers
 - iii. Use Coronary or Artifact menu to select frequent interpretations. These Terms can be changed in the Controls -> Define Buttons Function (under File) or by viewing the Access database (csf.mdb).
 - iv. *NO ISCHEMIA* checkbox and *NO CHANGE FROM PREVIOUS* checkbox generate sentences in the conclusion box.
 - v. **DO NOT FORGET TO PRESS BUILD** to compile into a conclusion paragraph. This can then be edited by typing in the box with any additions. Note all of above must be selected prior to pressing BUILD
 - vi. *RECOMMEND* box can be pressed to add another paragraph to the report with two pre-configured options (Medical Rx and Catheterization). Free text can be typed in the box provided.
- i. **GATED**
 - i. Enter the calculated Ejection Fraction
 - ii. *ADD DEFECTS* to select segments of regional dysfunction
 - iii. *DILATED* to explain changes in morphology
 - iv. Select final result for Gated
 - v. Press *BUILD* to compile conclusion paragraph. Enter text in box to alter it as needed.
- j. When finished press *COMPLETED*
 - i. To place a physician's name at the end of the report, *SELECT* a physician from the list.
 - ii. To leave the report without a physician's name, press *EXIT*
 - iii. Use *ADD/DELETE* to place/remove a physician's name

IV. Customizing Reports

- a. Templates
 - i. Reports are generate from two templates stored on the computer: mibi.dot (for two page reports) and mibi1.dot (for one page reports)
 - ii. Select one page reports from the Settings Page
 - iii. Different templates can be used on the same computer
 1. Hold down the Alt Key when pressing New on the Files Page and this will prompt you to select an 'alternative' template for that report

2. It will store a list of alternative templates which can be used (eg, if multiple providers are user)
- b. Placing Letterhead on Reports
 - i. Go into Word and edit mibi1.dot and/or mibi.dot, depending on whether you are using one- or two-page reports
 - ii. Place your letterhead in the header and footer of the documents and resave, replacing the original mibi.dot and mibi1.dot
 - iii. Make a backup of mibi.dot and mibi1.dot before changing them
 - iv. Fonts, spacing, etc.. can be altered but be careful ... change the Word program to 'show fields' under options to make sure you don't move inadvertently delete or alter any fields which are populated by CRG
- c. Other Options on Options Screen
 - i. Tc Agent – use to specify Myoview™, Cardiolite™, Sestamibi, etc
 - ii. Adenosine Time – specify time of adenosine infusion (4 – 6 minutes)
 - iii. Require Adenosine Dose – check box to put total dose of adenosine into report
 - iv. One Page Report – check box to use one-page report template (mibi1.dot needs to be in the Reports Directory and modified to have your header and footer information)

V. Maintaining Reports

- a. CSF.MDB is an access database which can be viewed at any time. Please do not alter any information in the database since the report generator is tightly linked with it and it may prevent normal functioning.
- b. Every report is generated as an MS Word document of the form *Pt_Last_Name Pt_Frist_Name Date.doc* inside the selected report folder. This can be viewed in MS Word and edited, reprinted, etc.

VI. Troubleshooting

- a. Windows 98 – If you are receiving errors and running an early version of Windows 98, please install DCOM98. This must be downloaded from the <http://www.microsoft.com/com/dcom/dcom98/download.asp>
- b. Windows XP – If you are also using Word XP, some systems may generate errors. Disable the CFTMON program. Please see: <http://support.microsoft.com/directory/article.asp?ID=KB;EN-US;Q282599&>
- c. Run-Time Error 713 - You are missing MSSTDFMT.DLL
 - i. Download from the web, for example as of this writing: <http://www.dll-files.com/dllindex/dll-files.shtml?msstdfmt>
 - ii. then copy it to c:\windows\system32
 - iii. Start Menu -> Run
 - iv. regsvr32 MSSTDFMT.DLL

Please Send All Comments, Suggestions, and Customization Requests to: info@cardiacimage.com