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Installing and operating the African-American BrCa Absolute Risk Assessment Tool
version 1.0                                creation date 11/16/07
version 1.1                                creation date 12/04/13
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ver 1.1 allows the projection ages T1 (current age) and T2 (projection age) to take on fractional values e.g. T1=30.2 and T2=35.7. In version 1.0, T1 and T2 were restricted to integer values only. also, raw values for the relative risk covariates are now required for input and will be grouped in the appropriate risk category level by the program. basic internal consistency for covariate responses is also being checked for by the program. however, it remains the user's responsibility to make sure that all input variable values are correct and consistent within a particular subject's record.

This installation and operation module pertains to Windows 32-bit operating system or Windows 64-bit operation system, depending of the user's requirements.

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@ Note that there are two versions of this software.  One version is for a 64-bit
@ operating system.  The other for a 32-bit system.  Please select the version
@ which corresponds to the operating system on the computer which it will be used
@ All needed components specifically for the 64-bit machine will have "_64" in
@ it's name.  Similarly, any needed componets for the 32-bit machine will have
@ "_32" somewhere in it's name.  All shared components will not have show these
@ three characters.
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@     NOTE WHEN UNSURE OF WHICH WINDOWS OPERATING SYSTEM, USE THE 32-BIT VERSION
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Contents of the Zip file "AfAmAbsRsk_Ver1_1.zip":

- | | |
|-----------------------|---|
| (a) AfAmAbsRsk_32.gcg | pre-compiled gauss program which performs
African-American BrCa Risk Projection for
32-bit Windows Operating System |
| (b) AfAmAbsRsk_64.gcg | pre-compiled gauss program which performs
African-American BrCa Risk Projection for
64-bit Windows Operating System |
| (c) AfAm_RR | sample relative risk profile input file read by the
above either of the above programs "AfAmAbsRsk_32.gcg"
or "AfAmAbsRsk_64.cg". |

- (d) AfAm_RR.compare projected risks by reading the above sample input file
- (e) 99-23Gail.pdf JNCI CARE manuscript
- (f) GRTM_11_Win_32.msi installation file for the gauss run-time module GSRun on a 32-bit computer
- (g) GRTM_11_Win_64.msi installation file for the gauss run-time module GSRun on a 64-bit computer
- (h) ReadMe.fil this file you are reading
 ReadMe.pdf pdf version of ReadMe.fil

After unzipping "AfAmAbsRsk_Ver1_1.zip", check to see that all files listed above are included. At this point, a cursory examination of "AfAm_RR" will prove useful. This file can be viewed using your favorite text editor or Notepad which is included with Windows.

Installation of the gauss run-time module GSRun:

The gauss run-time module GSRun will execute any pre-compiled gauss program. It is needed for the user to perform BrCa Absolute Risk Projections for African-American women by executing the provided pre-compiled programs "AfAmAbsRsk_32.gcg" or "AfAmAbsRsk_64.gcg", depending on the operating system.

For a 32 bit system, click on "GRTM_11_Win_32.msi" to start the installation process.

For a 64 bit system, click on "GRTM_11_Win_64.msi" to start the installation process.

- (a) the installer will ask you to accept the standard license agreement. After you accept the agreement, it will ask you where you want to install the gauss run-time module GSRun. If the default is acceptable click "next", otherwise click "browse". If you clicked "browse", a box will appear where you can type in the destination of the installation process. In the following, assume you choose to install in the the folder "c:\CareRisk".
- (b) at the completion of the installation process, the installer will place a gauss run-time module icon on the desktop. It is recommended leaving the icon on the desktop for ease of use.
- (c) copy the three files "AfAmAbsRsk_32.gcg" (or "AfAmAbsRsk_64.gcg"), "AfAm_RR" and "AfAm_RR.compare" to where you installed the gauss run-time module GSRun, namely "c:\CareRisk".

- (d) you may wish to copy this "ReadMe.fil" and the enclosed CARE paper to the folder "c:\CareRisk" as well.
- (e) the installation process is now complete.

A step by step example using the African-American BrCa Risk Assessment Tool:

- (a) after the installation process and assuming that you have copied the files "AfAmAbsRsk_32.gcg" (or "AfAmAbsRsk_64.gcg") and "AfAm_RR" to "c:\CareRisk", click on the gauss run-time module icon which was placed on the desktop by the installer.
- (b) gauss run-time module GSRun will open a window. At the gauss prompt ">>", type "run AfAmAbsRsk_32.gcg" (or run AfAmAbsRsk_64.gcg). The gauss run-time module GSRun will begin executing the absolute risk projection program.
- (c) the program will ask you to type the name of the input file. For this instance you should type "AfAm_RR" as your input file name. Note that the output file will be named "INPUT FILE NAME.out", i.e. the output file will be named "AfAm_RR.out".
- (d) the output file "AfAm_RR.out", written to "c:\CareRisk", containing the BrCa risk projections will be available for further perusal and analysis. For peace of mind, you may want to compare the generated output file "AfAm_RR.out" with the file "AfAm_RR.compare" included with the installation module. These two files can be viewed using Notepad or any other text editor. Upon ascertainment of complete agreement between the two files, you can proceed to delete the file "AfAm_RR.compare".

File name/structure for the input file to the African-American Risk program :

- (a) since the program prompts for the input file name, the input file may take on any arbitrary name. The name of the input file is case insensitive. For ease of use, the input file should be placed in the folder "c:\CareRisk". Again, note that the output file name will be "input file name.out" and will be created in the folder "c:\CareRisk".

the input file structure includes 10 columns of data with the following column order. all columns/fields are format free with each column separated by at least one or more blank space(s).

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col  1:  AgeGe50 Ind      Indicator of age ge 50
                        0 = age lt 50
                        1 = age ge 50

col  2:  NBiops          # of breast biopsies      (non-negative integer counts)
col  3:  AgeMen          age at menarche in years  (non-negative integer years)

col  4:  AgeFlb          age 1st live birth in years. This covariate is
                        not considered as a brca risk factor for
                        Africian-American women in the CARE study.
                        Included for backward compatibility with the
                        NCI BrCa Risk Assessment Tool (non-negative integer yrs)

col  5:  NumRel          # of first degree relatives with breast cancer
                        (non-negative integer counts)

col  6:  hyperplasia?    biopsy displays atypical hyperplasia?
                        0   = no
                        1   = yes
                        99 = unk or not applicable response
                        IF NBiops = 0, hyperplasia      MUST BE 99
                        IF NBiops > 0, hyperplasia can be 0,1 or 99

col  7:  race            1=White  2=Africn-American  3=Hispanics  4=Other
                        program will delete all records with a race ne 2.
                        If no record in this file has a race value of 2
                        (ie no African-Americans women), program terminates.

col  8:  Current Age T1  current age in years in the set [20,90)  e.g. 35.8
col  9:  Projctn Age T2  projctn age in years in the set (T1,90]  e.g. 58.9
                        constraint of:  0 <= T1 < T2 <= 90

col 10:  ID #            integer number in the set {1,2,3...}

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in the above {} denotes a collection/set of numbers

[) represents an interval closed on the left and open on the right
 [] represents an interval open on the left and closed on the right

this program will categorize the raw values of NBiops, AgeMen, NumRel into risk categories according to the rules outlined in the CARE manuscript. AgeFlb is not considered a risk factor for the CARE BrCA RR model for African-American women. It is included for compatibility with the NCI BrCa Risk Assessment Tool. It's value is set to zero by the program regardless of the value on the input file.

note that the program, being an analytical tool, will make the most rudimentary checks for logical consistency between the input variables. It is the user's

responsibility to make sure that all input covariate values are logically consistent and correct within each person. As a final step, the program will generate a missing projected Absolute Risk for records which it deems to be in error. The user should examine the output file for any records with a missing Absolute Risk and rectify the error(s) for these records.

e.g. if NBIops equals zero than atypical hyperplasia must be 99 (not applicable)
or Projection Age in years must be greater than Current Age

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Terms & Conditions

Source Code for CARE model: African-American Women Breast Cancer Risk Calculation Module

Non-Proprietary Software Transfer Agreement

Provider: National Institutes of Health (NIH), National Cancer Institute (hereinafter "NCI")

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