DOCUMENTATION

OF

CONSTRUCTED VARIABLES

IN

MILWAUKEE MIDUS

SURVEY

University of Wisconsin

Institute on Aging

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X:\Administrative Database\DBS\Milwaukee\Milwaukee 1\Public Release\Aug2008\Documentation\M2_Milwaukee Documentation of Constructed Variables_8-28-07.docx

CHRONIC CONDITION

Summary Variables:

Number of Chronic Conditions (in past 12 month) [BACCHRON]

- [BACCHRON] is a continuous variable based on the total number of chronic conditions the respondent check to have experienced in the past 12 months.
- Questions used to construct [BACCHRON]

: CAPI Questionnaire, Section 1, Question As11 (a to dd)

Coding: 1 Yes; 2 No.

Scaling: [BACCHRON] is constructed by taking the **total number** of "Yes" responses to the questions.

Missing Values: [BACCHRON] is computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACCHRON] is not calculated and coded as "98" for "NOT CALCULATED (Due to missing data)."

Having Chronic Condition [BACCHROX]

: A dummy variable based on [BACCHRON]

= 1 if [BACCHRON] is greater than or equal to 1

= 0 if [BACCHRON] is 0

PRESCRIPTION MEDICINE

Summary Variables:

Number of medicine taking (in past 30 days) [BACRXMED]

- [BACRXMED] is a continuous variable based on the total number of prescription medicines the respondent has taken during the past 30 days.

- Questions used to construct [BACRXMED]

  : CAAPI Questionnaire, Section 1, Question As12 (a to l).

Coding: 1 Yes; 2 No.

Scaling: [BACRXMED] is constructed by taking the **total number** of "Yes" responses to the questions.

Missing Values: [BACRXMED] is computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACRXMED] is not calculated and coded as "98" for "NOT CALCULATED (Due to missing data)."

Having Taken medicines [BACRXMEX]

: A dummy variable based on [BACRXMED]

= 1 if [BACRXMED] is greater than or equal to 1

= 0 if [BACRXMED] equals 0

VITAMINS AND SUPPLEMENTS

Summary Variables:

- Number of Vitamin etc. taking (in past 30 days) [BACSPLMN]

- [BACSPLMN] is a continuous variable based on the total number of Vitamin/Mineral/Herbal Supplements the respondent has taken regularly (at least couple of times a week).

- Questions used to construct [BACSPLMN]

: CAPI Questionnaire, Section 1, Question As14 (a to o).

Coding: 1 Yes; 2 No.

Scaling: [BACSPLMN] is constructed by taking the **total number** of "Yes" responses to the questions.

Missing Values: [BACSPLMN] is computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACSPLMN] is not calculated and coded as "98" for "NOT CALCULATED (Due to missing data)."

Having Taken Vitamin or Other Supplements [BACSPLMX]

: A dummy variable based on [BACSPLMN]

= 1 if [BACSPLMN] is greater than or equal to 1

= 0 if [BACSPLMN] equals 0

ACTIVITY OF DAILY LIVING

Summary Variables:

Basic Activity of Daily Living [BACBADL]

- Questions used to construct [BACBADL]

: CAPI Questionnaires, Section 1; Questions As28 (b, d, h)

(How much does your health limit you in doing each of the following?"

b. "Bathing or dressing yourself"

d. "Climbing one flight of stairs"

h. "Walking one block"

Intermediate Activity of Daily Living [BACIADL]

- Questions used to construct [BACIADL]

: CAPI Questionnaires, Section 1; Questions As28 (a, c, e, f, g, I, j)

(How much does your health limit you in doing each of the following?"

a. "Lifting or carrying groceries"

c. "Climbing several flights of stairs"

e. "Bending, kneeling, or stooping"

f. "Walking more than a mile"

g. "Walking several blocks"

i. "Vigorous activities (e.g., running, lifting heavy objects)"

j. "Moderate activities (e.g., bowling, vacuuming)"

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: The summary variables are constructed by calculating the mean of all the reverse-coded values of the items in each scale. Higher scores reflect a greater difficulty in performing each activities of daily life.

Missing Values: The summary variables are computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACBADL] and/or [BACIADL] is not calculated and coded as “98” for “NOT CALCULATED (Due to missing data).”

DYSPNEA

Summary Variables:

Progressive Levels of Dyspnea [BACDYSPN]

- Questions used to construct [BACDYSPN]

: CAPI Questionnaires, Section 1; Questions As29 (a to d)

(Do you get short of breath in the following situations?")

a. "When hurrying on ground level or walking up a slight hill."

b. "When walking with other people your age on level ground."

c. "When walking at your own pace on level ground."

d. "When washing or dressing."

Coding: 1 Yes; 2 No.

Scaling: [BACDYSPN] is constructed by determining the respondent's consecutive positive responses to the question (A29a through A29d). Higher scores indicates greater progressive levels of Dyspnea.

: [BACDYSPN]

=1 if the respondent answered "Yes" to only A29a.

= 2 if the respondent answered "Yes" to A29a AND A29b.

= 3 if the respondent answered "Yes" to A29a, A29b, and A29c.

= 4 if the respondent answered "Yes" to A29a, A29b, A29c and A29d.

Missing Values: The scale is computed for cases that had valid responses to **all four questions** used in the summary variable. [BACDYSPN] is not calculated for cases that have missing data in any questions in the summary variable, and coded as "8" for "NOT CALCULATED (Due to missing data)."

BODY INDICES

Summary Variables:

Waist to Hip Ratio [BACWSTHI]

- Questions used to construct [BACWSTHI]

: CAPI Questionnaires, Section 1; Questions As35 (waist size) and Question As36 (hip size)

Scaling: [BACWSTHI] is calculated by dividing the waist size (in inches) by the hip size (in inches).

: In calculating waist to hip ratio, following rules were applied to handle extreme cases

1. To limit the extremes, any waist measurement below 20 was set to 20, and any hip measurement below 22 was set to 22, and anything above 75 to 75.
2. Any ratio that is beyond 4 standard deviations (above or below) from the mean within gender is coded as "9" to be an extreme case and defined as a missing value.

Body Mass Index [BACBMI]

- Questions used to construct [BACBMI]

: CAPI Questionnaires, Section 1; Questions As37a and As37b (height), and As39 (weight).

Scaling: [BACBMI] is calculated by dividing respondent's weight (mass) in kilograms by heights in meters squared. The height measure (in inches) was multiplied by 0.0254 to get the height in meters, and the weight (in pounds) was multiplied by 0.4536 to get the mass in kilometers.

: To limit the extremes, any heights greater than 84 inches were set to 84 inches

SEEING DOCTORS & MENTAL HEALTH PROFESSIONALS

Summary Variables:

Number of Times Seeing Medical Doctors (in the past 12 months) [BACUSEMD]

- [BACUSEMD] is a continuous variable based on the total number of times the respondent reported seeing doctors for various reasons.
- Questions used to construct [BACUSEMD]

  : CAPI Questionnaire, Section 1, Question As53 (a, d, e).

  a. A doctor, hospital or clinic for a routine physical check-up or gynecological exam.

  d. A doctor, emergency room, or clinic for urgent care treatment

  e. A doctor, hospital, clinic, dentist or ophthalmologist for scheduled treatment or surgery.

Number of Times Seeing Mental Health Professionals (in the past 12 months) [BACUSEMH]

- [BACUSEMH] is a continuous variable based on the total number of times the respondent reported seeing professionals for emotional or mental health.
- Questions used to construct [BACUSEMH]

  : CAPI Questionnaire, Section 1, Question As54 (a to d).

  a. A psychiatrist.

  b. A general practitioner or other medical doctor.

  c. A psychologist, professional counselor, marriage therapist, or social worker.

  d. A minister, priest, rabbi or other spiritual advisor.

Coding: number of times the respondent saw the doctors/professionals./

Scaling: [BACUSEMD] and [BACUSEMH] are constructed by summing up total number of times the respondent reported seeing doctors/professionals in each question.

Missing Values: [BACUSEMD] and [BACUSEMH] are computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACUSEMD] and/or [BACUSEMH] is not calculated and coded as “998” for “NOT CALCULATED (Due to missing data).”

ALCOHOL SCREENING TEST

Summary Variables:

Having alcohol related problems (during the past 12 months) [BACALCOH]

- Questions used to construct [BACALCOH]

: CAPI Questionnaire, Section 1, Question As66 (a to d).

a. Did you have any emotional or psychological problems form using alcohol, such as feeling depressed, being suspicious of people, or having strange ideas?

b. Did you have such a strong desire or urge to use alcohol that you could not resist or could not think of anything else?

c. Did you have a period of a month or more when you spent a great deal of time using alcohol or getting over its effects?

d. Did you find that you had to use more alcohol than usual to get the same effect or that the same amount had less effect on you than before?

Coding: 1 Yes; 2 No.

Scaling: [BACALCOH] is a dummy variable indicating that the respondent has at least one alcohol-related problem.

[BACALCOH]

= 1 if the respondent answered “Yes” to any of four questions.

= 0 otherwise.

Missing Values: [BACALCOH] is computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACALCOH] is not calculated and coded as “8” for “NOT CALCULATED (Due to missing data).”

Sources:

Grzywacz, J. G., & Marks, N. F. (1999). Family solidarity and health behaviors: Evidence from the National Survey of Midlife Development in the United States. *Journal of Family Issues*, *20*, 2, 243-268.

References:

Selzer, M. L. (1971). The Michigan Alcohol Screening Test: The quest for a new diagnostic instrument. *American Journal of Psychiatry*, *127*, 89-94.

Note:

- The following item was accidentally omitted during final editing of the MIDUS-II questionnaire.

  "Were you ever, during the past 12 months, under the effects of alcohol or feeling its after-effects in a situation which increased your chances of getting hurt - such as when driving a car or boat, or using knives or guns or machinery?" (A44a in MIDUS-I)

HOUSEHOLD INCOME VARIABLES

Note: The imputed income variables were created based on mean values of age/gender/education sub-groups. Marital status and employment status were not considered in the imputation process. Therefore, the imputed incomes maybe inflated in some cases.

Summary Variables:

Demographic Background Variables (used for sub-group mean imputation)

[BACSAGE]: Spouse's age (= "Interview year" – "Birth year of spouse")

[BACRHIED]: A dummy variable for the respondent's education (based on [BACB1])

= 0 if High School graduate or less.

= 1 if Some college or more.

[BACSHIED]: A dummy variable for the spouse's education (based on [BACB33])

= 0 if High School graduate or less.

= 1 if Some college or more.

[BACRAGE3]: A categorical variable for the age group of the respondent

= 1 if the respondent is 49 years old or younger

= 2 if the respondent is between age 50 and 69

= 3 if the respondent is 70 years old or older

[BACSAGE3]: A categorical variable for the age group of the spouse.

= 1 if the respondent is 49 years old or younger

= 2 if the respondent is between age 50 and 69

= 3 if the respondent is 70 years old or older

[BACSXAGE]: A categorical variable for subgroup category of the respondents based on "Age," "Gender," and "Education."

- Variables used to construct [BACSXAGE]

: [BACRSEX] (Gender of respondent), [BACRHIED], [BACRAGE3]

= 101 if R male & High school grad or less & Age 49 or younger

= 102 if R male & High school grad or less & Age between 50 and 69

= 103 if R male & High school grad or less & Age 70 or older

= 111 if R male & Some college or more & Age 49 or younger

= 112 if R male & Some college or more & Age between 50 and 69

= 113 if R male & Some college or more & Age 70 or older

= 201 if R female & High school grad or less & Age 49 or younger

= 202 if R female & High school grad or less & Age between 50 and 69

= 203 if R female & High school grad or less & Age 70 or older

= 211 if R female & Some college or more & Age 49 or younger

= 212 if R female & Some college or more & Age between 50 and 69

= 213 if R female & Some college or more & Age 70 or older

[BACSXAGE]: A categorical variable for subgroup category of the spouse based on "Age," "Gender (of the respondent)," and "Education."

- Variables used to construct [BACSXAGE]

: [BACRSEX] (Gender of respondent), [BACSHIED], [BACSAGE3]

= 101 if R male & SP High school grad or less & SP Age 49 or younger

= 102 if R male & SP High school grad or less & SP Age between 50 and 69

= 103 if R male & SP High school grad or less & SP Age 70 or older

= 111 if R male & SP Some college or more & SP Age 49 or younger

= 112 if R male & SP Some college or more & SP Age between 50 and 69

= 113 if R male & SP Some college or more & SP Age 70 or older

= 201 if R female & SP High school grad or less & SP Age 49 or younger

= 202 if R female & SP High school grad or less & SP Age between 50 and 69

= 203 if R female & SP High school grad or less & SP Age 70 or older

= 211 if R female & SP Some college or more & SP Age 49 or younger

= 212 if R female & SP Some college or more & SP Age between 50 and 69

= 213 if R female & SP Some college or more & SP Age 70 or older

Respondent's Income Variables

(based on CAPI Questionnaire Question G8 a, b, c)

[BACGSS8AX]: "Personal Earning Income" of the respondent, using mid-point of response category range of Question G8a.

[BACGSS8AY]: "Subgroup-mean imputed Personal Earning Income" of the respondent, based on [BACGSS8AX] (set the highest limit at $200,000)

[BACGSS8BX]: "Pension Income" of the respondent, using mid-point of response category range of Question G8b.

[BACGSS8BY]: "Subgroup-mean imputed Pension Income" of the respondent, based on [BACGSS8BX] (set the highest limit at $200,000)

[BACGSS8CX]: "Social Security Income" of the respondent, using mid-point of response category range of Question G8c.

[BACGSS8CY]: "Subgroup-mean imputed Social Security Income" of the respondent, based on [BACGSS8CX] (set the highest limit at $200,000)

[BACRINC1]: Total income of the respondent based on original income variables (= sum of [BACGSS8AX], [BACGSS8BX], AND [BACGSS8CX])

[BACRINC2]: Total income of the respondent based on the subgroup mean imputed income variables (= sum of [BACGSS8AY], [BACGSS8BY], AND [BACGSS8CY])

Missing Values: [BACRINC1] and [BACRINC2] are computed for cases that have **at least one** valid response to questions used in the income summary variable. For cases that do not have any valid response to questions in the summary variable, [BACRINC1] and [BACRINC2] are not calculated and coded as "9999998" for "NOT CALCULATED (Due to missing data)."

NOTE: [BACGSS8AX], [BACGSS8BX], [BACGSS8CX] are not available on public release. And, in the public release, [BACRINC1] and [BACRINC2] are top-coded at $200,000

Spouse's Income Variables

(based on CAPI Questionnaire Question G9 a, b, c)

[BACGSS9AX]: "Personal Earning Income" of the spouse, using mid-point of response category range of Question G9a.

[BACGSS9AY]: "Subgroup-mean imputed Personal Earning Income" of the spouse, based on [BACGSS9AX] (set the highest limit at $200,000)

[BACGSS9BX]: "Pension Income" of the spouse, using mid-point of response category range of Question G9b.

[BACGSS9BY]: "Subgroup-mean imputed Pension Income" of the spouse, based on [BACGSS9BX] (set the highest limit at $200,000)

[BACGSS9CX]: "Social Security Income" of the spouse, using mid-point of response category range of Question G9c.

[BACGSS9CY]: "Subgroup-mean imputed Social Security Income" of the spouse, based on [BACGSS9CX] (set the highest limit at $200,000)

[BACSINC1]: Total income of the spouse based on original income variables (= sum of [BACGSS9AX], [BACGSS9BX], AND [BACGSS9CX])

[BACSINC2]: Total income of the spouse based on the subgroup mean imputed income variables (= sum of [BACGSS9AY], [BACGSS9BY], AND [BACGSS9CY])

Missing Values: [BACSINC1] and [BACSINC2] are computed for cases that have **at least one** valid response to questions used in the income summary variable. For cases that do not have any valid response to questions in the summary variable, [BACSINC1] and [BACSINC2] are not calculated and coded as "9999998" for "NOT CALCULATED (Due to missing data)."

NOTE: [BACGSS9AX], [BACGSS9BX], [BACGSS9CX] are not available on public release. And, in the public release, [BACSINC1] and [BACSINC2] are top-coded at $200,000.

Other Family Member's Income Variables

(based on CAPI Questionnaire Question G10 a, b, c)

[BACGSS10AX]: "Personal Earning Income" of other family members, using mid-point of response category range of Question G10a.

[BACGSS10AY]: "Subgroup-mean imputed Personal Earning" Income of other family members, based on [BACGSS9AX] (set the highest limit at $200,000)

[BACGS10BX]: "Pension Income" of family members, using mid-point of response category range of Question G10b.

[BACGS10BY]: "Subgroup-mean imputed Pension Income" of other family members, based on [BACGS9BX] (set the highest limit at $200,000)

[BACGS10CX]: "Social Security Income" of family members, using mid-point of response category range of Question G10c.

[BACGS10CY]: "Subgroup-mean imputed Social Security Income" of other family members, based on [BACGS9CX] (set the highest limit at $200,000)

[BACHINC1]: Total income of the family members based on original income variables (= sum of [BACGS10AX], [BACGS10BX], AND [BACGS10CX])

[BACHINC2]: Total income of the family members based on the subgroup mean imputed income variables (= sum of [BACGS10AY], [BACGS10BY], AND [BACGS10CY])

Missing Values: [BACHINC1] and [BACHINC2] are computed for cases that have **at least one** valid response to questions used in the income summary variable. For cases that do not have any valid response to questions in the summary variable, [BACHINC1] and [BACHINC2] are not calculated and coded as "9999998" for "NOT CALCULATED (Due to missing data)."

NOTE: [BACGS10AX], [BACGS10BX], [BACGS10CX] are not available on public release. And, in the public release, [BACHINC1] and [BACHINC2] are top-coded at $200,000.

Household Total Personal Earning Income

[BACEARN1]: Total personal earning income of the household based on original income variables (= sum of [BACGS8AX], [BACGS9AX], AND [BACGS10AX])

[BACEARN2]: Total personal earning income of the household based on the subgroup mean imputed income variables (= sum of [BACGS8AY], [BACGS9AY], AND [BACGS10AY])

Missing Values: [BACEARN1] and [BACEARN2] are computed for cases that have **at least one** valid response to questions used in the income summary variable. For cases that do not have any valid response to questions in the summary variable, [BACEARN1] and [BACEARN2] are not calculated and coded as "9999998" for "NOT CALCULATED (Due to missing data)."

NOTE: In the public release, [BACEARN1] and [BACEARN2] are top-coded at $200,000.

Household Total Pension Income

[BACPNSN1]: Total pension income of the household based on original income variables (= sum of [BACGS8BX], [BACGS9BX], AND [BACGS10BX])

[BACPNSN2]: Total pension income of the household based on the subgroup mean imputed income variables (= sum of [BACGS8BY], [BACGS9BY], AND [BACGS10BY])

Missing Values: [BACPNSN1] and [BACPNSN2] are computed for cases that have **at least one** valid response to questions used in the income summary variable. For cases that do not have any valid response to questions in the summary variable, [BACPNSN1] and [BACPNSN2] are not calculated and coded as "9999998" for "NOT CALCULATED (Due to missing data)."

NOTE: In the public release, [BACPNSN1] and [BACPNSN2] are top-coded at $200,000.

Household Total Social Security Income

[BACSEC1]: Total social security income of the household based on original income variables (= sum of [BACGS8CX], [BACGS9CX], AND [BACGS10CX])

[BACSEC2]: Total social security income of the household based on the subgroup mean imputed income variables (= sum of [BACGS8CY], [BACGS9CY], AND [BACGS10CY])

Missing Values: [BACSEC1] and [BACSEC2] are computed for cases that have **at least one** valid response to questions used in the income summary variable. For cases that do not have any valid response to questions in the summary variable, [BACSEC1] and [BACSEC2] are not calculated and coded as "9999998" for "NOT CALCULATED (Due to missing data)."

NOTE: In the public release, [BACSEC1] and [BACSEC2] are top-coded at $200,000.

Household Government Assistance Income

[BACGS12Y]: "Subgroup-mean imputed Government Assistance Income" of the household, based on [BACGS12X] (set the highest limit at $200,000)

NOTE: [BACGS12X] is not available on public release, and in the public release, [BACGS12Y] is top-coded at $200,000.

Total Household Income

[BACTINC1]: Total household income across different types and different sources, based on original income variables
(= sum of [BACGS8AX], [BACGS8BX], [BACGS8CX], [BACGS9AX], [BACGS9BX], [BACGS9CX], [BACGS10AX], [BACGS10BX], [BACGS10CX], AND [BACGS12])

[BACTINC2]: Total household income across different types and different sources, based on the subgroup mean imputed income variables
(= sum of [BACGS8AY], [BACGS8BY], [BACGS8CY], [BACGS9AY], [BACGS9BY], [BACGS9CY], [BACGS10AY], [BACGS10BY], [BACGS10CY], AND [BACGS12Y])

Missing Values: [BACTINC1] and [BACTINC2] are computed for cases that have **at least one** valid response to questions used in the income summary variable. For cases that do not have any valid response to questions in the summary variable, [BACTINC1] and [BACTINC2] are not calculated and coded as "9999998" for "NOT CALCULATED (Due to missing data)."

NOTE: In the public release, [BACTINC1] and [BACTINC2] are top-coded at $300,000.