

# 2011–2012 Uganda Post-Abortion Care Costing Study

## Public-Use Dataset Users' Guide

Data collected by the Guttmacher Institute  
2011–2012

Public-use dataset prepared by the Guttmacher Institute  
October 2017

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### Introduction; about the data

These data come from a 2011–2012 survey of women who received post-abortion care (PAC) at health facilities across Uganda. The dataset contains information on treatment costs, on the impact of abortion complications on children in the household, on the productivity of the respondent and other household members, and on changes in economic circumstances.

Interviewers collected data on individual and household socioeconomic characteristics costs of obtaining an unsafe abortion (including multiple steps to end a pregnancy), obtaining post-abortion care and recuperating from an unsafe abortion. Information relating to a woman's admission to the facility, including the nature and severity of her complications, the treatment received and duration of any hospital stay, was also collected from each patient's principal post-abortion care provider. Information about the costs of treatment was collected from health facility administrators and from the Ministry of Health. Information on the costs of contraception was also collected.

The study involved the following data collection efforts:

1. Interviews with 1,338 post-abortion care patients during their stay at the facility (97% response rate).

2. Follow-up interviews, conducted 2–3 months later among a subset of 518 of the original respondents (71% response rate).
3. Interviews with health care personnel (100% response rate): (a) the principal provider responsible for each post-abortion patient to obtain clinical information on each interviewed patient; and (b) health facility administrators to obtain costs of the care provided.

Purposive sampling was employed. Data collection efforts took place in 39 facilities, selected to represent different types of facilities and different regions of Uganda.

The final file includes 420 female patients who responded to both the initial and follow-up interviews and were classified as certainly, probably or possibly having had an induced abortion. The file contains 949 variables. All the variables are numeric in type except for the variables `note1`, `note2`, `note3`, `note4`, `p101`, `q922note`, `remark1`, `remark2`, and `ID`. Variable labels are applied to all variables and value labels are applied to variable values when appropriate. One variable, `q904c`, was dropped because it did not contain value labels and it was not possible to determine the meaning of its values.

A number of recodes were generated to facilitate use of the data. Programming for these recodes can be found below in the “Syntax for derived and recoded variables” section. We have provided a codebook in a separate document with information on each variable in the dataset, as well as the questionnaires that were used in the field.

## Contact person

For inquiries about this dataset, please contact Suzette Audam through the Guttmacher Center for Population Research Innovation and Dissemination at [popcenter@guttmacher.org](mailto:popcenter@guttmacher.org) or via phone at (212) 248-1111.

## Available data formats

The data are available in the following formats:

- Stata (.dta data file plus .do do-file)

The data will be made available in the following formats shortly:

- SAS (.sas7bdat data file plus .sas setup file)
- SPSS (.sav data file plus .sas syntax file)
- ASCII (.txt)
- Excel/tab-separated (.tsv)

## Key variables

The unique respondent identifier is ID. Day, month, and year of interview are q207a, q207b, and q207c.

Key demographic variables include q102a (age at last birthday), q302 (urban vs. rural residence), q303/q303a (highest level of education completed), q311 (parity), and q304 (relationship status).

The study used purposive sampling. There are no weight or sample design variables.

## Data notes

All cost data was collected in Ugandan shillings (UGX).

Where applicable, binary variables were converted from (2 = No, 1 = Yes) to (0 = No, 1 = Yes).

## Missing values

Numeric variables generally have standard missing values (.) and/or extended missing values with value labels (e.g., .d for Don't know). In some cases, numeric variables may also have valid values of 96, 97, 98, 99, etc. The meaning of these values are explained in their value labels. String variables have been assigned a value of "" for missing.

## Recoded or derived variables

Some variables have been recoded or derived in order to facilitate analysis. Farther below in this document is a subset of the SAS code that was used to create these variables.

The original variables in this dataset begin with "q" for the initial questionnaire, "f" for the follow-up questionnaire, or "p" for the provider section. The remaining variables are recoded or derived.

Please note that some original variables in the dataset may contain invalid values and discrepancies, as they were not used in previously published analyses. **Whenever available, recoded variables should be used instead of original variables.** There are two cases when it may be necessary to use original variables: 1) when variables were not related to analyses, and so a recoded version does not exist, and 2) when recoded variables differ from their corresponding original variables in the information that they contain and are not ideal for answering a specific research question. For instance, if an analysis requires the exact age of each respondent, one should use the original age variable as opposed to a recode that collapses age into 5-year age groups. When using original variables for either of these reasons, it is the responsibility of the user to cross-check and clean those variables.

Some variables have been removed from the dataset because the information that they contain is included in other variables.

## Extended methodology

### *Data collection (sampling)*

A sample of 39 Ugandan health facilities were purposively selected to represent different levels of health care in different regions of the country. A total of 1,338 Ugandan women admitted into these health facilities for treatment of complications of abortion were interviewed once while at the facility, and a subset of 518 women were re-interviewed about 2–3 months after the initial interview. The final file includes 420 female patients who responded to both the initial and follow-up interviews and were classified as certainly, probably or possibly having had an induced abortion.

### *Data collection (survey)*

Initial interviews began in September 2011 and were completed in January 2012. Follow-up interviews were conducted from December 2011 through March 2012. All structured questionnaires were administered by nurses and midwives, many of whom were involved in the care of the patients. Since they were on the facilities' staffs, we reasoned that they would have better access to both the patients and to their providers, and being health care providers themselves, we felt that they would have greater legitimacy in asking questions on the women's health status and conducting an interview on the sensitive topic of induced abortion. All interviews were conducted in private rooms in the facility, after the women had received treatment.

The initial survey obtained data on various topics, including the amount of money women and their households spent on obtaining an unsafe abortion, obtaining postabortion care, and recuperating from an unsafe abortion. The economic data collected includes data on household income, consumption, employment, assets, savings, and debt. PAC patients were also asked about their out-of-pocket expenditures, their sources of funds, and the amount of productive time lost for both the respondent and other members of their household as a result of the attempt to terminate the pregnancy in an unsafe manner. The follow-up interviews included similar questions to measure changes in the women's economic circumstances, and also collected information on additional costs incurred after their discharge from health facilities as well as lost productivity.

Interviews with the principal health care provider for each woman included clinical information on the nature and severity of complications, diagnoses, treatments received and duration of stay in the health facility.

Ethical clearance for the study was obtained both in Uganda (Makerere University and the Uganda National Council for Science and Technology) and in the United States (Guttmacher Institute). Informed consent was obtained from all survey respondents prior to interview. The questionnaires were administered in the main languages spoken in Uganda. No tokens of appreciation or compensation were given as part of the survey.

### **Bibliography of articles based on the dataset**

Sundaram, A., Vlassoff, M., Mugisha, F., Bankole, A., Singh, S., Amany, L., and Onda, T. (2013). Documenting the individual and household-level cost of unsafe abortion in Uganda. *International Perspectives on Sexual and Reproductive Health*, 39, 174–184.

Vlassoff, M., Mugisha, F., Sundaram, A., Bankole, A., Singh, S., Amany, L., and Mirembe, F. (2014). The health system cost of post-abortion care in Uganda. *Health Policy and Planning*, 29, 56–66.

## Syntax for derived and recoded variables

```

provabtype
*create a combined abortion type variable;
provabtype = .;
if certain = 1 then provabtype = 1;
else if probable = 1 then provabtype = 2;
else if possible = 1 then provabtype = 3;
else if spont = 1 then provabtype = 4;
label provabtype = 'revised abortion classification variable';

agriasset
*create an index for people owning agricultural assets;
agriasset = SUM (numcattle, animc);
label agriasset = 'total number of livestock and animal carts owned';

illamtlostresp
*how much income lost;
illamtlostresp = .;
if q807 = . and q820a = . then illamtlostresp = .;
else if q807 ne . and q820a = . then illamtlostresp = q807;
else if q807 = . and q820a ne . then illamtlostresp = q820a;
else if q807 ne . and q820a ne . then illamtlostresp = max (q807, q820a);
label illamtlostresp = 'amount of money the respondent lost due to unsafe
abortion';

illamtlostoth
illamtlostoth = .;
if q809 = . and q821a = . then illamtlostoth = .;
else if q809 ne . and q821a = . then illamtlostoth = q809;
else if q809 = . and q821a ne . then illamtlostoth = q821a;
else if q809 ne . and q821 ne . then illamtlostoth = max (q809, q821a);
label illamtlostoth = 'amount of income lost by others in the household';

illnowrkany
***create a single variable for ability to work in the first wave***;
**combine respondents inability to work with her husbands inability to
work**;
illnowrkany = .;
if uablwork = . and huswork = . then illnowrkany = .;
else if uablwork = 1 or huswork = 1 then illnowrkany = 1; *unable to work;
else illnowrkany = 0; *able to work;
label illnowrkany = 'was anyone in the household unable to work because of
respondents illness Y/N';

illinclostany
illinclostany = .;
if illinclostresp = . and losincoth = . then illinclostany = .;
else if illinclostresp = 1 or losincoth = 1 then illinclostany = 1; *yes
someone lost income;
else illinclostany = 0; *no no-one lost income;
label illinclostany = 'did anyone in the hh lose income Y/N';

illincwrklostany
***create a 3 category variable for income loss and work loss in a combined
variable***;
illincwrklostany = .;
if illinclostany = . and illnowrkany = . then illincwrklostany = .;
else if illinclostany = 1 and illnowrkany = 1 then illincwrklostany = 1;
*lost both work and income;
else if illinclostany = 1 or illnowrkany = 1 then illincwrklostany = 2;
*either lost work or income;
else illincwrklostany = 0; *didn't lose work or income;

```

label illincwrklostany = '3 category variable for loss of income or work';

illwrkchgany

```
*create one binary from the above to indicate if anyone in hh experienced
changes to their work;
illwrkchgany = .;
if workchange = . and hworkchange = . and wrkchgchld = . and wrkchgoth = .
then illwrkchgany = .;
else if workchange = 1 or hworkchange = 1 or wrkchgchld = 1 or wrkchgoth = 1
then illwrkchgany = 1; *yes wked > or < due to illness;
else illwrkchgany = 0; *no either unaffected or affected due to reasons other
than illness;
label illwrkchgany = 'did anyone in the hh work more or less due to
respondents illness Y/N';
```

assetownchg

```
***Change in overall assets over two waves***;
assetownchg = .;
if rarssets = 1 then do;
    if rassetsfup = 1 then assetownchg = 1; *continue to own assets as
before;
    else if rassetsfup = 0 then assetownchg = 2; *lost assets;
end;
if rassets = 0 then do;
    if rassetsfup = 1 then assetownchg = 3; *gained assets;
    else if rassetsfup = 0 then assetownchg = 4; *continued to own no
assets;
end;
label assetownchg = 'change in asset ownership status over two waves';
```

assetown

```
***ownership of assets that go up in value;
assetown = .;
if ownothhouse = . and cattle = . and farm = . then assetown = .;
else if ownothhouse = 0 and farm = 0 and cattle = 0 then assetown = 0; *no
assets;
else if ownothhouse = 1 and cattle in (.,0) and farm in (.,0) then assetown =
1; *own 1 home only;
else if farm = 1 and ownothhouse in (.,0) and cattle in (.,0) then assetown =
2; *own farm only;
else if cattle = 1 and ownothhouse in (.,0) and farm in (.,0) then assetown =
3; *own cattle only;
else assetown = 4; *own multiple assets;
```

assetownfup

```
***ownership of assets that go up in value -- follow up survey;
assetownFUP = .;
if homeownchnumber = . and cattleFUP = . and ownfarmFUP = . then assetownFUP
= .;
else if homeownchnumber = 0 and ownfarmFUP = 0 and cattleFUP = 0 then
assetownFUP = 0; *no assets;
else if homeownchnumber = 1 and cattleFUP in (.,0) and ownfarmFUP in (.,0)
then assetownFUP = 1; *own 1 home only;
else if ownfarmFUP = 1 and homeownchnumber in (.,0) and cattleFUP in (.,0)
then assetownFUP = 2; *own 1 farm only;
else if cattleFUP = 1 and homeownchnumber in (.,0) and ownfarmFUP in (.,0)
then assetownFUP = 3; *own livestock only;
else assetownFUP = 4; *own multiple assets;
```

assetscount

```
gen assetscount=.
replace assetscount = ownothhousedummy+farm+cattle
```



```

assetscountfup
gen assetscountfup=.
replace assetscountfup = homeownchnumberdummy+ownfarmFUP+cattlefup

debtbad
debtbad = .;
if q608a = . and q608b = . and q608c = . and q608d = . and q608e = . and
q608f = . and q608g = . and q608h = . and q608i = . then debtbad = .;
else if q608c = 1 or q608e = 1 or q608f = 1 or q608h = 1 or q608i in
(1, 3, 4, 5) then debtbad = 1;
else debtbad = 0;
label debtbad = 'consumer debt or debt incurred for purchase of commodities
that are likely to decrease in value';

numnecess
*household basics variable;
numnecess = .;
if pipewater = . and roof = . and ntoilet = . and electric = . then numnecess
= .;
else numnecess = sum (pipewater, roof, ntoilet, electric);
label numnecess = 'index of basic necessities of life';

numnecessnorroof
numnecessnorroof = .;
if pipewater = . and ntoilet = . and electric = . then numnecessnorroof = .;
else numnecessnorroof = sum (pipewater, ntoilet, electric);
label numnecessnorroof = 'index of basic necessities of life';

profitallbiz
***total income***;
profitallbiz = earningallbiz - totspend;

complsevrbleed
complsevrbleed = .;
if q814a = . and q826a = . then complsevrbleed = .;
else if (q814a = 1 and q814a1 = 1) or (q826a = 1 and q826a1 = 1) then
complsevrbleed = 1; *mild;
else if (q814a = 1 and q814a1 = 2) or (q826a = 1 and q826a1 = 2) then
complsevrbleed = 2; *moderate;
else if (q814a = 1 and q814a1 = 3) or (q826a = 1 and q826a1 = 3) then
complsevrbleed = 3; *severe;
else if q814a = 2 or q826a = 2 then complsevrbleed = 0; *no complications;

ownboat
ownboat = .;
if q415f in (., -8, 96, 98) and q415g in (., -8, 96, 98) then ownboat = .;
else if q415f = 1 or q415g = 1 then ownboat = 1; /*have boat*/
else ownboat = 0; /*no boat*/

inccdaychld
inccdaychld = .;
if cindexday = 1 and cindexwk = 1 then inccdaychld = .;
else inccdaychld = q560c;
label inccdaychld = 'daily income of wage workers adjusted for overlaps with
weekly income category -- child';

earnmthchld
*create a single index for earnings in cash and earnings in kind;
earnmthchld = .;
if incmthchld = . and q560b = . then earnmthchld = .;
else if q560b ne . and incmthchld = . then earnmthchld = q560b;
else if q560b ne . and incmthchld ne . then earnmthchld = q560b + incmthchld;
else earnmthchld = incmthchld;

```

```

label earnmthchld = 'monthly earnings for wage work -- kind and cash -- for
child';

incmthall
*combine respondents and her husband's income with childs;
incmthall = .;
if earnmthresp = . and earnmthhusb = . and earnmthchld = . then incmthall =
.;
else incmthall = sum (earnmthresp, earnmthhusb, earnmthchld);
label incmthall = 'combined earnings of husband, respondent, and child';

negconschld
***create a 3 category variable for child consequences***;
negconschld = .;
if childsch = . and childeat = . then negconschld = .;
else if childsch = 0 and childeat = 1 then negconschld = 1; *unable to attend
school and eat as usual;
else if childsch = 0 or childeat = 1 then negconschld = 2; *either unable to
attend school or eat as usual;
else negconschld = 0; *no consequences;
label negconschld = '3 category variable for any negative consequences for
the child';

incmthchld
*create a single monthly earnings index;
incmthchld = .;
if q560e = . and cday2mth = . and cwk2mth = . then incmthchld = .;
else if q560e = . and cday2mth ne . then incmthchld = cday2mth;
else if q560e = . and cwk2mth ne . then incmthchld = cwk2mth;
else incmthchld = q560e;
label incmthchld = 'monthly income for all persons earning a wage - child';

incmthcoup
*combine respondents and her husband's income;
incmthcoup = .;
if earnmthresp = . and earnmthhusb = . then incmthcoup = .;
else incmthcoup = sum (earnmthresp, earnmthhusb);
label incmthcoup = 'combined earnings of husband and respondent';

consgoods
*create an index for number of consumer goods owned;
consgoods = SUM(newradio, cassette, tv, cellph, landl, fridge, ntable,
nchair, sofa, nbed, cboard, nclock, bike, motorbk, cartr, sewm);
label consgoods = 'total number of consumer goods owned by respondent';

consgoodschg
*create a new index for changes in consumer goods;
consgoodschg = .;
if consgoods2 = . and consgoodsfup = . then consgoodschg = .;
else if consgoods2 = consgoodsfup then consgoodschg = 1; *no change;
else if consgoods2 > consgoodsfup then consgoodschg = 2; *lost over time;
else if consgoods2 < consgoodsfup then consgoodschg = 3; *gained over time;
label consgoodschg = 'change in consumer goods ownership over time';

propconsul exp
if medexp ne 0 then propconsul exp = consexp/medexp; *label propconsul exp =
'consultation expense as a proportion of total expense';

incwkchld
incwkchld = .;
if cindexwk = 1 and cindexmth = 1 then incwkchld = .;
else incwkchld = q560d;

```

label incwkchld = 'weekly income of wage workers adjusted for overlaps with monthly income category -- child';

```
wrkchgchld
wrkchgchld = .;
if cworkchg1 = . and cworkchg2 = . then wrkchgchld = .;
else if cworkchg1 = 1 or cworkchg2 = 1 then wrkchgchld = 1; *yes;
else wrkchgchld = 0; *no;
label wrkchgchld = 'any change in childs wage work due to illness--had to work more or less due to R illness Y/N';
```

```
incdayresp
incdayresp = .;
if indexday = 1 and indexwk = 1 then incdayresp = .;
else incdayresp = q542c;
label incdayresp = 'daily income of wage workers adjusted for overlaps with weekly income category';
```

```
debtttype
debtttype = .;
if nodebt = 1 then debtttype = 0; *no debt;
*else if q604 = 1 and q608a = . and q608b = . and q608c = . and q608d = . and q608e = . and q608f = . q608g = . and q608h = . and q608i = . then debtttype = .;
else if bothdebt = 0 and debtgood = 1 then debtttype = 1; *good debt only;
else if bothdebt = 0 and debtbad = 2 then debtttype = 2; *bad debt only;
else if bothdebt = 1 then debtttype = 3; *both good and bad debts;
label debtttype = 'classification of types of debt to keep them mutually exclusive';
```

```
discnexpyr
*total discretionary expenditure in a year;
discnexpyr = sum (bedding, furn, china, appliance, jewels, vehicle, therapy, repairs, insurance, vacation, social);
label discnexpyr = 'discretionary expenses in a year';
```

```
earnchgresp
earnchgresp = .;
if earningyn = . and earningynFUP = . then earnchgresp = .;
else if earningyn = 1 then do;
    if earningynFUP = 1 then earnchgresp = 1; *continues to earn;
    else if earningynFUP = 2 then earnchgresp = 2; *become not earning;
    else if earningynFUP = 3 then earnchgresp = 3; *became a student;
end;
else if earningyn = 2 then do;
    if earningynFUP = 1 then earnchgresp = 4; *became earning;
    else if earningynFUP = 2 then earnchgresp = 5; *remained not earning;
    else if earningynFUP = 3 then earnchgresp = 6; *became student;
end;
else if earningyn = 3 then do;
    if earningynFUP = 1 then earnchgresp = 7; *became earning;
    else if earningynFUP = 2 then earnchgresp = 8; *became not earning;
    else if earningynFUP = 3 then earnchgresp = 9; *remained student;
end;
else if earningyn = . then do;
    if earningynFUP = 1 then earnchgresp = 10; *likely remained earning;
    else if earningynFUP = 2 then earnchgresp = 11; *likely remained not earning;
    else if earningynFUP = 3 then earnchgresp = 12; *likely remained student;
```

```

end;
label earnchgresp = 'change in respondents earning/timeuse status';

earnchghusb
earnchghusb = .;
if hearningyn = . and hearningynFUP = . then earnchghusb = .;
else if hearningyn = 1 then do;
    if hearningynFUP = 1 then earnchghusb = 1; *continues to earn;
    else if hearningynFUP = 2 then earnchghusb = 2; *become not earning;
    else if hearningynFUP = 3 then earnchghusb = 3; *became a student;
end;

else if hearningyn = 2 then do;
    if hearningynFUP = 1 then earnchghusb = 4; *became earning;
    else if hearningynFUP = 2 then earnchghusb = 5; *remained not earning;
    else if hearningynFUP = 3 then earnchghusb = 6; *became student;
end;

else if hearningyn = 3 then do;
    if hearningynFUP = 1 then earnchghusb = 7; *became earning;
    else if hearningynFUP = 2 then earnchghusb = 8; *became not earning;
    else if hearningynFUP = 3 then earnchghusb = 9; *remained student;
end;

else if hearningyn = . then do;
    if hearningynFUP = 1 then earnchghusb = 10; *likely remained earning;
    else if hearningynFUP = 2 then earnchghusb = 11; *likely remained not
earning;
    else if hearningynFUP = 3 then earnchghusb = 12; *likely remained
student;
end;
label earnchghusb = 'change in respondents husbands earning/timeuse status';

earnmthresp
*create a single index for earnings in cash and earnings in kind;
earnmthresp = .;
if mthinc = . and q542b = . then earnmthresp = .;
else if q542b ne . and mthinc = . then earnmthresp = q542b;
else if q542b ne . and mthinc ne . then earnmthhusb = q542b + mthinc;
else earnmthresp = mthinc;
label earnmthresp = 'monthly earnings for wage work -- kind and cash';

biztype
*no. people with farm and nonfarm business;
biztype = .;
if farm = . and nonfarm = . then biztype = .;
else if farm = 1 and nonfarm = 1 then biztype = 1; *have both;
else if farm = 1 and nonfarm = 0 then biztype = 2; *farm only;
else if farm = 0 and nonfarm = 1 then biztype = 3; *nonfarm business only;
else biztype = 0; *have neither;
label biztype = 'classification of respondents who have farm and nonfarm
business';

farmsizechg
farmsizechg = .;
if farmfup in (1, 3, 5) then do;
    if F505a = . then farmsizechg = .;
    else if F505a = 2 then farmsizechg = 1; *yes decreased;
    else farmsizechg = 2; *no change or increased;
end;
else if farmfup in (2, 4, 6) then farmsizechg = 0; /*never owned land or dont
own anymore*/
label farmsizechg = 'Has the amount of farm land owned decreased since last
survey Y/N';

```

```

farmfup
***do you own agricultural land Y/N***;
farmfup = .;
if farm = 1 then do;
    if F504 in(., 98) then farmfup = 9; *valid response in wave 1 but
invalid in wave 2;
    else if F504 in (1, 2) then farmfup = 1; /*yes continue to own agric
land*/
    else if F504 = 3 then farmfup = 2; /*no don't own land anymore --
loss*/
end;
if farm = 0 then do;
    if F504 in(., 98) then farmfup = 9; *valid response in wave 1 but
invalid in wave 2;
    else if F504 in (1, 2) then farmfup = 3; /*yes currently own agric land
-- gain*/
    else if F504 = 3 then farmfup = 4; /*never owned land -- continue*/
end;
if farm = . then do;
    if F504 in(., 98) then farmfup = .;
    else if F504 in (1, 2) then farmfup = 5; /*yes currently own agric land
-- likely continue*/
    else if F504 = 3 then farmfup = 6; /*don't own land -- likely
continue*/
end;
label farmfup = 'land ownership status';

foodexpmthwk
*total grocery expense in a week -- from first set;
foodexpmthwk = sum (rrice, rmatoke, rtubers, rcereals, rsugar, rwheat,
rbeans, rmeat, roil, rmilk, reggs, rvegetabl, rfruit);

foodexpmth
*add salt and drinks to this set to get total food related expenses for 1
month;
foodexpmth = SUM (foodexmth, rsalt, rdrinks);
label foodexpmth = 'food related expenditure over a month';

debtgood
debtgood = .;
if q608a = . and q608b = . and q608c = . and q608d = . and q608e = . and
q608f = . and q608g = . and q608h = . and q608i = . then debtgood = .;
else if q608a = 1 or q608b = 1 or q608d = 1 or q608g = 1 or q608i = 2 then
debtgood = 1;
else debtgood = 0;
label debtgood = 'debt incurred for investments which increase in value over
time';

earningallbiz
*sum all the gross receipts from a business;
earningallbiz = .;
if q513 = . and q523 = . and q533 = . then earningallbiz = .;
else earningallbiz = sum (q513, q523, q533);
label earningallbiz = 'total earnings from all business';

inccdayhusb
inccdayhusb = .;
if hindexday = 1 and hindexwk = 1 then inccdayresp = .;
else inccdayhusb = q551c;
label inccdayhusb = 'daily income of wage workers adjusted for overlaps with
weekly income category - husband';

earnmthhusb

```

```
*create a single index for earnings in cash and earnings in kind;
earnmthhusb = .;
if incmthhusb = . and q551b = . then earnmthhusb = .;
else if q551b ne . and incmthhusb = . then earnmthhusb = q551b;
else if q551b ne . and incmthhusb ne . then earnmthhusb = q551b + incmthhusb;
else earnmthhusb = incmthhusb;
label earnmthhusb = 'monthly earnings for wage work -- kind and cash -- for husband';
```

```
ftpthusb
*sub-classify the husbands as full time or part-time;
ftpthusb = .;
if q501a = . then ftpthusb = .;
else if q501a = 1 then ftpthusb = 1; *full-time;
else if q501a = 96 and q550 ne 0 then ftpthusb = 1; *full time;
else if q501a = 2 then ftpthusb = 2; *part-time;
else ftpthusb = 3; *not applicable;
label ftpthusb = 'husband works full time or part time';
```

```
incmthhusb
*next create a single monthly earnings index;
incmthhusb = .;
if q551e = . and hday2mthft = . and hwk2mthft = . and hday2mthpt = . and
hwk2mthpt = . then incmthhusb = .;
else if q551e = . and hday2mthft ne . then incmthhusb = hday2mthft;
else if q551e = . and hwk2mthft ne . then incmthhusb = hwk2mthft;
else if q551e = . and hday2mthpt ne . then incmthhusb = hday2mthpt;
else if q551e = . and hwk2mthpt ne . then incmthhusb = hwk2mthpt;
else incmthhusb = q551e;
label incmthhusb = 'monthly income for all persons earning a wage - husband';
```

```
occuphusb
***create an occupational category variable for husband***;
occuphusb = .;
if hstudent = . and wrkhusb = . and hunpd = . then occuphusb = .;
else if wrkhusb = 1 then occuphusb = 1; *works full time or part time;
else if hstudent = 1 then occuphusb = 2; *student;
else if hunpd = 1 then occuphusb = 3; *unemployed or unpaid;
label occuphusb = 'husbands occupational categories to reflect his time use';
```

```
occuphusbfup
occuphusbfup = .;
if occuphusb = 1 then do;
    if F501 = . then occuphusbfup = 99; *valid before invalid now;
    else if F501 in (3, 4, 5, 6) then occuphusbfup = .; *not applicable therefore
missing;
    else if F501 = 2 then occuphusbfup = 1; *works ft/pt as before;
    else if F501 = 1 then do;
        if F501a = . then occuphusbfup = 98;
        else if F501a in (1, 2) then occuphusbfup = 2; *working FTPT --
merge with above later;
        else if F501a = 4 then occuphusbfup = 3; *student -- change;
        else if F501a in (5, 6) then occuphusbfup = 4; *unemployed/unpaid
-- change;
        else if F501a = 96 then occuphusbfup = 5; *working FTPT -- merge
with above later;
        end;
    end;
end;
```

```
if occuphusb = 2 then do;
    if F501 = . then occuphusbfup = 99; *valid before invalid now;
    else if F501 in (3, 4, 5, 6) then occuphusbfup = .; *not applicable therefore
missing;
    else if F501 = 2 then occuphusbfup = 6; *remains student as before;
```

```

    else if F501 = 1 then do;
        if F501a = . then occuphusbfup = 98;
        else if F501a in (1, 2) then occuphusbfup = 7; *working FTPT --
change;
        else if F501a = 4 then occuphusbfup = 8; *student -- merge with
above;
        else if F501a in (5, 6) then occuphusbfup = 9; *unemployed/unpaid
-- change;
        else if F501a = 96 then occuphusbfup = 10; *working FTPT --
change;
    end;
end;

if occuphusb = 3 then do;
    if F501 = . then occuphusbfup = 99; *valid before invalid now;
    else if F501 in (3, 4, 5, 6) then occuphusb = .; *not applicable therefore
mi ssi ng;
    else if F501 = 2 then occuphusbfup = 11; *unemployed/unpaid as before;
    else if F501 = 1 then do;
        if F501a = . then occuphusbfup = 98;
        else if F501a in (1, 2) then occuphusbfup = 12; *working FTPT --
change;
        else if F501a = 4 then occuphusbfup = 13; *student -- change;
        else if F501a in (5, 6) then occuphusbfup = 14; *unemployed/unpaid
-- merge with above later;
        else if F501a = 96 then occuphusbfup = 15; *working FTPT --
change;
    end;
end;

if occuphusb = . then do;
    if F501 = . then occuphusbfup = .; *mi ssi ng as before;
    else if F501 in (3, 4, 5, 6) then occuphusb = .; *not applicable therefore
mi ssi ng;
    else if F501 = 2 then occuphusbfup = 16; *new details since there was
nothi ng before;
    else if F501 = 1 then do;
        if F501a = . then occuphusbfup = .;
        else if F501a in (1, 2) then occuphusbfup = 17; *working FTPT --
change;
        else if F501a = 4 then occuphusbfup = 18; *student -- change;
        else if F501a in (5, 6) then occuphusbfup = 19; *unemployed/unpaid
-- change;
        else if F501a = 96 then occuphusbfup = 20; *working FTPT --
change;
    end;
end;

ownothhouse
*use this;
ownothhouse = .;
if q418 in (., 98, -8, 96) then ownothhouse = .;
else if q418 = 3 and house = 1 then ownothhouse = 1; /*own only one home*/
else if house = 1 and q418 in (1, 2) then ownothhouse = 2; /*yes owns another
house*/
else ownothhouse = 0; /*no dont own any home*/

incwkhusb
incwkhusb = .;
if hindexwk = 1 and hindexmth = 1 then incwkhusb = .;
else incwkhusb = q551d;
label incwkhusb = 'weekly income of wage workers adjusted for overlaps with
monthly income category - husband';

```

```

wrkhusb
*does the respondent's husband work to earn a living at a job FT PT or self-
employed?;
wrkhusb = .;
if q501a = . then wrkhusb = .;
else if q501a in (1, 2) then wrkhusb = 1; /*yes*/
else if q501a = 96 and q550 ne 0 then wrkhusb = 1; /*yes*/
else wrkhusb = 0; /*no*/
label wrkhusb = 'is the respondents husband working for a living in any
capacity Y/N';

```

```

complsevrijury
complsevrijury = .;
if q814d = . and q826d = . then complsevrijury = .;
else if (q814d = 1 and q814d1 = 1) or (q826d = 1 and q826d1 = 1) then
complsevrijury = 1; *mild;
else if (q814d = 1 and q814d1 = 2) or (q826d = 1 and q826d1 = 2) then
complsevrijury = 2; *moderate;
else if (q814d = 1 and q814d1 = 3) or (q826d = 1 and q826d1 = 3) then
complsevrijury = 3; *severe;
else if q814d = 2 or q826d = 2 then painseverity = 0; *no complications;

```

```

econactivchg
****has either the respondent or her husband have had to downgrade their jobs
between the two waves?****;
econactivchg = .;
if occuprespfpup = . and occuphusbfup = . then econactivchg = .;
else if occuprespfpup in (3, 5, 10, 12, 17, 19, 24, 33, 38, 40) then econactivchg = 1;
*respondent no longer economically productive;
else if occuphusbfup in (4, 9, 19) then econactivchg = 2; *husband is no longer
economically productive;
else if occuprespfpup in (22, 26, 29, 31) then econactivchg = 3; *respondents
remains economically inactive;
else if occuphusbfup in (11, 14) then econactivchg = 4; *husband remains
economically inactive;
else if occuprespfpup in (1, 2, 4, 6, 7, 8, 9, 11, 13, 14, 15, 16, 18, 20, 21) then
econactivchg = 5; *R remains econ active;
else if occuphusbfup in (1, 2, 3, 5, 6, 7, 8, 10) then econactivchg = 6; *husb
remains econ active;
else if occuprespfpup in (23, 25, 27, 28, 30, 32, 34, 35, 37, 39, 41, 42) then
econactivchg = 7; *R became econ active;
else if occuphusbfup in (12, 13, 15, 17, 18, 20) then econactivchg = 8; *husb
became econ active;
label econactivchg = 'did either respondent or her husband/partner become
economically inactive/active between the two waves';

```

```

numjobemployee
*No. of jobs held by those working for someone else only, ie no exclusively
self employed person considered;
numjobemployee = .;
if employed = . and q540 = . then numjobemployee = .;
else if employed = 1 and q540 = 0 then numjobemployee = 0;
else if employed = 1 and q540 = 1 then numjobemployee = 1;
else if employed = 1 and q540 = 2 then numjobemployee = 2;
else if employed = 1 and q540 = 3 then numjobemployee = 3;
label numjobemployee = 'number of jobs held by those who are employed by
someone else';

```

```

livexpindex
livexpindex = SUM (school, docexp, clothesexp);
label livexpindex = 'index of basic living expenses';

```

```

proploggeexpresp

```



```

if medexp ne 0 then proplodgeexpresp = lodgexp/medexp; *label
proplodgeexpresp = 'lodging expense as a proportion of total expense';

proplodgeexppoth
if medexp ne 0 then proplodgeexppoth = lodgothexp/medexp; *label
proplodgeexppoth = 'others lodging expense as a proportion of total expense';

illinclostresp
*income lost Y/N;
illinclostresp = .;
if (q806 = . or q806 in (-8, 98)) and (q820 = . and q820 in (-8, 98)) then
illinclostresp = .;
else if q806 = 1 or q820 = 1 then illinclostresp = 1; /*yes lost income*/
else illinclostresp = 0; /*no didn't lose income*/
label illinclostresp = 'lost income due to health';

maj goodschg
maj goodschg = .;
if maj goods = . and maj goodsfup = . then maj goodschg = .;
else if maj goods = maj goodsfup then maj goodschg = 1; *no change;
else if maj goods > maj goodsfup then maj goodschg = 2; *lost over time;
else if maj goods < maj goodsfup then maj goodschg = 3; *gained over time;
label maj goodschg = 'change in major consumer goods ownership over time';

maj goodsfup
maj goodsfup = .;
if cassettefup = . and television = . and fridgefup = . and sofaset = . and
cupboard = . and clock = . and motorcycle = . and cartruck = . then
maj goodsfup = .;
else maj goodsfup = SUM (cassettefup, television, fridgefup, sofaset,
cupboard, clock, motorcycle, cartruck);
label maj goodsfup = 'number of major consumer goods owned in wave 2';

maj goods
*create a new index for changes in major consumer goods;
maj goods = .;
if cassette = . and tv = . and fridge = . and sofa = . and cboard = . and
nclock = . and motorbk = . and cartr = . then maj goods = .;
else maj goods = sum (cassette, tv, fridge, sofa, cboard, nclock, motorbk,
cartr);
label maj goods = 'number of major consumer goods owned in wave 1';

medexp
*sum of all medical expenses;
medexp = sum(transexp, consexp, testexp, suppexp, lodgexp, lodgothexp,
othexp);

medexpfup
medexpfup = sum(transexpfup, suppexpfup, feesexpfup, othfeesfup,
othmedexpfup, othnonmedexpfup);

incmthfam
*next create a single monthly earnings index;
incmthfam = .;
if q542e = . and day2mthft = . and wk2mthft = . and day2mthpt = . and
wk2mthpt = . then incmthfam = .;
else if q542e = . and day2mthft ne . then incmthfam = day2mthft;
else if q542e = . and wk2mthft ne . then incmthfam = wk2mthft;
else if q542e = . and day2mthpt ne . then incmthfam = day2mthpt;
else if q542e = . and wk2mthpt ne . then incmthfam = wk2mthpt;
else incmthfam = q542e;
label incmthfam = 'monthly income for all persons earning a wage';

mthli vexpindex = li vexpindex/12;

```

```

label mthlivexpindex = 'living expenses per month';

multbiz
*respondents with multiple businesses;
multbiz = .;
if nonfarm1 = . and nonfarm2 = . and nonfarm3 = . then multbiz = .;
else if nonfarm1 = 0 then multbiz = 0; *no businesses;
else if (nonfarm1 = 1 and nonfarm2 in (.,0) and nonfarm3 in (.,0)) then
multbiz = 1; *only 1 business;
else if (nonfarm1 = 1 and nonfarm2 = 1 and nonfarm3 in (.,0)) then multbiz =
2; *2 businesses;
else if nonfarm1 = 1 and nonfarm2 = 1 and nonfarm3 = 1 then multbiz = 3; *3
businesses;
label multbiz = 'number of businesses a respondent has';

multbizfup
***ownership of multiple businesses;
multbizfup = .;
if statusnonfarm1fup in (.,9) then multbizfup = .;
else if statusnonfarm1fup in (2,4,6) then multbizfup = 0; *no businesses;
else if statusnonfarm1fup in (1,3,5) and statusnonfarm2fup in (.,9,2,4,6) and
statusnonfarm3fup in (.,9,2,4,6) then multbizfup = 1; *1 business;
else if statusnonfarm1fup in (1,3,5) and statusnonfarm2fup in (1,3,5) and
statusnonfarm3fup in (.,9,2,4,6) then multbizfup = 2; *2 businesses;
else if statusnonfarm1fup in (1,3,5) and statusnonfarm2fup in (1,3,5) and
statusnonfarm3fup in (1,3,5) then multbizfup = 3; *3 businesses;
label multbizfup = 'number of businesses a respondent has';

negconsfup
negconsfup = .;
if assetownchg = . and totdebtFUP = . and illwrkchgany = . and majgoodschg =
. and foodcompare = . then negconsfup = .;
else if assetownchg = 2 or totdebtFUP in (2,3) or illwrkchgany = 1 or
majgoodschg = 2 or foodcompare = 1 then negconsfup = 1;
else negconsfup = 0;
label negconsfup = 'any negative economic consequence in wave 2 -- using
major consumer goods';

statusnonfarm1fup
*****own non-farm business 1 Y/N*****;
statusnonfarm1fup = .;
if nonfarm1 = 1 then do;
    if F513 in (.,98) then statusnonfarm1fup = 9;
    else if F513 = 1 then statusnonfarm1fup = 1; *yes still functioning --
continue;
    else if F513 = 2 then statusnonfarm1fup = 2; *no not functioning
anymore -- loss;
end;
if nonfarm1 = 0 then do;
    if F513 in (.,98) then statusnonfarm1fup = 9;
    else if F513 = 1 then statusnonfarm1fup = 3; *yes gained a business --
gain;
    else if F513 = 2 then statusnonfarm1fup = 4; *never had a nonfarm
business -- continue;
end;
if nonfarm1 = . then do;
if F513 in (.,98) then statusnonfarm1fup = .; *true missing;
    else if F513 = 1 then statusnonfarm1fup = 5; *yes have a business --
likely gain;
    else if F513 = 2 then statusnonfarm1fup = 6; *dont have a nonfarm
business -- likely continue;
end;
label statusnonfarm1fup = 'status of 1st non farm business';

```

```

statusnonfarm2fup
*own non-farm business 2 Y/N;
statusnonfarm2fup = .;
if nonfarm2 = 1 then do;
    if F522 in (., 98) then statusnonfarm2fup = 9;
    else if F522 = 1 then statusnonfarm2fup = 1; *yes still functioning --
continue;
    else if F522 = 2 then statusnonfarm2fup = 2; *no not functioning --
loss;
end;
if nonfarm2 = 0 then do;
    if F522 in (., 98) then statusnonfarm2fup = 9;
    else if F522 = 1 then statusnonfarm2fup = 3; *yes functioning -- gain;
    else if F522 = 2 then statusnonfarm2fup = 4; *never had a nonfarm
business -- continue;
end;
if nonfarm2 = . then do;
    if F522 in (., 98) then statusnonfarm2fup = .; *true missing;
    else if F522 = 1 then statusnonfarm2fup = 5; *yes functioning -- likely
gain;
    else if F522 = 2 then statusnonfarm2fup = 6; *never had a nonfarm
business -- continue;
end;
label statusnonfarm2fup = 'status of 2nd non farm business';

```

```

statusnonfarm3fup
*own non-farm business 3 Y/N;
statusnonfarm3fup = .;
if nonfarm3 = 1 then do;
    if F532 in (., 98) then statusnonfarm3fup = 9;
    else if F532 = 1 then statusnonfarm3fup = 1; *yes still functioning --
continue;
    else statusnonfarm3fup = 2; *no not functioning -- loss;
end;
if nonfarm3 = 0 then do;
    if F532 in (., 98) then statusnonfarm3fup = 9;
    else if F532 = 1 then statusnonfarm3fup = 3; *yes functioning -- gain;
    else if F532 = 2 then statusnonfarm3fup = 4; *no don't have nonfarm
business -- continue;
end;
if nonfarm3 = . then do;
    if F532 in (., 98) then statusnonfarm3fup = .; *missing in both waves;
    else if F532 = 1 then statusnonfarm3fup = 5; *yes functioning -- likely
gain;
    else if F532 = 2 then statusnonfarm3fup = 6; *no don't have nonfarm
business -- likely continue;
end;
label statusnonfarm3fup = 'status of 3rd non farm business';

```

```

revchgnonfarm1fup
*has this business's revenue been affected because of respondent's illness;
revchgnonfarm1fup = .;
if statusnonfarm1fup in (1, 3, 5) then do;
    if F514 = 2 then do;
        if F515a in (1, 2) or F515a1 in (5, 9) then revchgnonfarm1fup = 1;
        *yes decreased due to illness;
        else if F515a1 in (1, 2, 3, 4, 6, 7, 8, 10) then revchgnonfarm1fup = 2;
        *decreased for other reasons;
    end;
    if F514 in (1, 3) then revchgnonfarm1fup = 3; *no change or increase;
end;
else if statusnonfarm1fup in (2, 4, 6) then revchgnonfarm1fup = 0; *never
had/dont currently have a nonfarm business;

```

label revchgnonfarm1fup = 'have the receipts from 1st non-farm business been affected by illness and need for money?';

```

revchgnonfarm2fup
*has this business's revenue been affected because of respondent's illness;
revchgnonfarm2fup = .;
if statusnonfarm2fup in (1, 3, 5) then do;
    if F523 = 2 then do;
        if F524a in (1, 2) or F524a1 in (5, 9) then revchgnonfarm2fup = 1;
    *yes decreased due to illness;
        else if F524a1 in (1, 2, 3, 4, 6, 7, 8, 10) then revchgnonfarm2fup = 2;
    *decreased for other reasons;
    end;
    if F523 in (1, 3) then revchgnonfarm2fup = 3; *no change or increase;
end;
else if statusnonfarm2fup in (2, 4, 6) then revchgnonfarm2fup = 0; *never
had/dont currently have a 2nd nonfarm busines;
label revchgnonfarm2fup = 'have the receipts from 2nd non-farm business been
affected by illness and need for money?';

```

```

revchgnonfarm3fup
*has this business's revenue been affected because of respondent's illness;
revchgnonfarm3fup = .;
if statusnonfarm3fup in (1, 3, 5) then do;
    if F533 = 2 then do;
        if F534a in (1, 2) or F534a1 in (5, 9) then revchgnonfarm3fup = 1;
    *yes decreased due to illness;
        else if F534a1 in (1, 2, 3, 4, 6, 7, 8, 10) then revchgnonfarm3fup = 2;
    *decreased for other reasons;
    end;
    if F533 in (1, 3) then revchgnonfarm3fup = 3; *no change or increase;
end;
else if statusnonfarm3fup in (2, 4, 6) then revchgnonfarm3fup = 0; *never
had/dont currently have a 3rd nonfarm busines;
label revchgnonfarm3fup = 'have the receipts from 3rd non-farm business been
affected by illness and need for money?';

```

```

timefachsrs
timefachsrs = .;
if q902a ne . then timefachsrs = q902a;
else if q902a = . and q902b = 0 then timefachsrs = 8;
else if q902a = . and q902b = 1 then timefachsrs = 24;
else if q902a = . and q902b = 2 then timefachsrs = 48;
else if q902a = . and q902b = 3 then timefachsrs = 72;
else if q902a = . and q902b = 4 then timefachsrs = 96;
else if q902a = . and q902b = 5 then timefachsrs = 120;
else if q902a = . and q902b = 6 then timefachsrs = 144;
else if q902a = . and q902b = 7 then timefachsrs = 168;
else if q902a = . and q902b = 8 then timefachsrs = 192;
else if q902a = . and q902b = 9 then timefachsrs = 216;
else if q902a = . and q902b = 10 then timefachsrs = 240;
else if q902a = . and q902b = 11 then timefachsrs = 264;
else if q902a = . and q902b = 12 then timefachsrs = 288;
else if q902a = . and q902b = 13 then timefachsrs = 312;
else if q902a = . and q902b = 14 then timefachsrs = 336;
else if q902a = . and q902b = 27 then timefachsrs = 648;
else if q902a = . and q902b = 43 then timefachsrs = 1032;
else if q902a = . and q902b = 44 then timefachsrs = 1056;
label timefachsrs = 'continuous variable for time spent in facility in hours';
numcattle
numcattle = .;
if cattle = . then numcattle = .;
else if cattle = 1 then do;
    numcattle = SUM (q416a, q416b, q416c, q416d, q416e, q416f, q416g);

```

```

end;
label numcattle = 'number of livestock owned';

numcond1 numcond2 numcond3
*get a count of number of mild moderate and severe conditions per respondent;
array symp {4} complsevrbleed fever painseverity complsevrijury;
  numcond1 = 0;
  numcond2 = 0;
  numcond3 = 0;

  do i = 1 to 4;
    if symp {i} = 1 then do; *number mild conditions;
      numcond1 + 1;
    end;
    if symp {i} = 2 then do; *number moderate conditions;
      numcond2 + 1;
    end;
    if symp {i} = 3 then do; *number severe conditions;
      numcond3 + 1;
    end;
  end;

label numcond1 = 'number of mild conditions per person';
label numcond2 = 'number of moderate conditions per person';
label numcond3 = 'number of severe conditions per person';

occupresp
*reclassify the various occupational categories from the first section;
occupresp = .;
if student = . and hwife = . and employed = . and unpd = . and workyn = .
then occupresp = .;
else if q502a = 7 or employed = 0 then occupresp = 1; *self employed;
else if workyn = 1 or employed = 1 then occupresp = 2; *working for someone
else;
else if student = 1 then occupresp = 3; *student;
else if unpd = 1 then occupresp = 4; *unemployed or unpaid work;
else if hwife = 1 then occupresp = 5; *housewife;
label occupresp = 'mutually occupational categories';

occuprespfup
occuprespfup = .;
if occupresp = 1 then do;
  if F502 = . then occuprespfup = 99; *valid before invalid now;
  else if F502 = 2 then occuprespfup = 1; *self-employed as before;
  else if F502 = 1 then do;
    if F502a = . then occuprespfup = 98;
    else if F502a in (1, 2) then occuprespfup = 2; *working for
someone else -- change;
    else if F502a = 3 then occuprespfup = 3; *housewife -- change;
    else if F502a = 4 then occuprespfup = 4; *student -- change;
    else if F502a in (5, 6) then occuprespfup = 5; *unemployed/unpaid
-- change;
    else if F502a = 7 then occuprespfup = 6; *self employed -- merge
it later;
    else if F502a = 96 then occuprespfup = 7; *working for someone
else -- merge with 2 above later;
  end;
end;

if occupresp = 2 then do;
  if F502 = . then occuprespfup = 99; *valid before invalid now;
  else if F502 = 2 then occuprespfup = 8; *working for someone else as
before;
  else if F502 = 1 then do;
    if F502a = . then occuprespfup = 98;

```

```

        else if F502a in (1, 2) then occuprespfup = 9; *working for
someone else -- merge later;
        else if F502a = 3 then occuprespfup = 10; *housewife -- change;
        else if F502a = 4 then occuprespfup = 11; *student -- change;
        else if F502a in (5, 6) then occuprespfup = 12; *unemployed/unpaid
-- change;
        else if F502a = 7 then occuprespfup = 13; *self employed --
change;
        else if F502a = 96 then occuprespfup = 14; *working for someone
else -- merge later;
        end;
end;

if occupresp = 3 then do;
    if F502 = . then occuprespfup = 99; *valid before invalid now;
    else if F502 = 2 then occuprespfup = 15; *student as before;
    else if F502 = 1 then do;
        if F502a = . then occuprespfup = 98;
        else if F502a in (1, 2) then occuprespfup = 16; *working for
someone else -- change;
        else if F502a = 3 then occuprespfup = 17; *housewife -- change;
        else if F502a = 4 then occuprespfup = 18; *student -- merge with
above later;
        else if F502a in (5, 6) then occuprespfup = 19; *unemployed/unpaid
-- change;
        else if F502a = 7 then occuprespfup = 20; *self employed --
change;
        else if F502a = 96 then occuprespfup = 21; *working for someone
else -- change;
        end;
end;

if occupresp = 4 then do;
    if F502 = . then occuprespfup = 99; *valid before invalid now;
    else if F502 = 2 then occuprespfup = 22; *unemployed as before;
    else if F502 = 1 then do;
        if F502a = . then occuprespfup = 98;
        else if F502a in (1, 2) then occuprespfup = 23; *working for
someone else -- change;
        else if F502a = 3 then occuprespfup = 24; *housewife -- change;
        else if F502a = 4 then occuprespfup = 25; *student -- change;
        else if F502a in (5, 6) then occuprespfup = 26; *unemployed/unpaid
-- merge later;
        else if F502a = 7 then occuprespfup = 27; *self employed --
change;
        else if F502a = 96 then occuprespfup = 28; *working for someone
else -- change;
        end;
end;

if occupresp = 5 then do;
    if F502 = . then occuprespfup = 99; *valid before invalid now;
    else if F502 = 2 then occuprespfup = 29; *housewife as before;
    else if F502 = 1 then do;
        if F502a = . then occuprespfup = 98;
        else if F502a in (1, 2) then occuprespfup = 30; *working for
someone else -- change;
        else if F502a = 3 then occuprespfup = 31; *housewife -- merge
later;
        else if F502a = 4 then occuprespfup = 32; *student -- change;
        else if F502a in (5, 6) then occuprespfup = 33; *unemployed/unpaid
-- change;
        else if F502a = 7 then occuprespfup = 34; *self employed --
change;

```

```

        else if F502a = 96 then occuprespfpup = 35; *working for someone
else -- change;
    end;
end;

if occupresp = . then do;
    if F502 = . then occuprespfpup = .; *missing as before;
    else if F502 = 2 then occuprespfpup = 36; *new information on their
activity;
    else if F502 = 1 then do;
        if F502a = . then occuprespfpup = .; *details are missing as
before;
        else if F502a in (1, 2) then occuprespfpup = 37; *working for
someone else -- new info;
        else if F502a = 3 then occuprespfpup = 38; *housewife -- new info;
        else if F502a = 4 then occuprespfpup = 39; *student -- new info;
        else if F502a in (5, 6) then occuprespfpup = 40; *unemployed/unpaid
-- new info;
        else if F502a = 7 then occuprespfpup = 41; *self employed -- new
info;
        else if F502a = 96 then occuprespfpup = 42; *working for someone
else -- new info;
    end;
end;

other
other = .;
if q905h1 = . and q905h2 = . and q905h4 = . then other = .;
else if q905h1 = 1 or q905h2 = 1 or q905h4 = 1 then other = 1;
else other = 0;
label other = 'other means to pay for expenses';

othercausesloss

losincoth
losincoth = .;
if (q808 = . or q808 in (-8, 98)) and (q821 = . and q821 in (-8, 98)) then
losincoth = .;
else if q808 = 1 or q821 = 1 then losincoth = 1; /*yes lost income*/
else losincoth = 0; /*no didn't lose income*/
label losincoth = 'others in household lost income due to health';

othreqexp
*total grocery expense in a month;
othreqexp = sum (rrest, rfuel, renter, rphonebill, rbathprod, rhhitem, rtpt,
rrent, rutil, rserv, rmed);
label othreqexp = 'monthly non-food but other essential expenditure in a
month';

wrkchgoth
wrkchgoth = .;
if wrklessoth = . and wrkmoreoth = . then wrkchgoth = .;
else if wrklessoth = 1 or wrkmoreoth = 1 then wrkchgoth = 1; *yes;
else wrkchgoth = 0; *no;
label wrkchgoth = 'any change in other hh members wage work due to illness--
had to work more or less due to R illness Y/N';

wrklessoth
***other hh members wage work changes ***;
wrklessoth = .;
if F575a = . then wrklessoth = .;
else if F575a in (1, 2) or F575a1 = 2 then wrklessoth = 1;
else wrklessoth = 0;

```

```
label wrklessoth = 'others worked less due to illness';
```

```
wrkmoreoth
```

```
wrkmoreoth = .;
if F575b = . then wrkmoreoth = .;
else if F575b in (1, 2) or F575b1 = 2 then wrkmoreoth = 1;
else wrkmoreoth = 0;
label wrkmoreoth = 'others worked more due to illness';
```

```
painseverity
```

```
painseverity = .;
if q814c = . and q826c = . then painseverity = .;
else if (q814c = 1 and q814c1 = 1) or (q826c = 1 and q826c1 = 1) then
painseverity = 1; *mild;
else if (q814c = 1 and q814c1 = 2) or (q826c = 1 and q826c1 = 2) then
painseverity = 2; *moderate;
else if (q814c = 1 and q814c1 = 3) or (q826c = 1 and q826c1 = 3) then
painseverity = 3; *severe;
else if q814c = 2 or q826c = 2 then painseverity = 0; *no complications;
```

```
pregunwanted
```

```
*create the new abortion classification variable;
pregunwanted = .;
if q701 in (2, 3) or q703 = 1 then pregnunwanted = 1; *wanted preg later or
never;
else pregnunwanted = 0; *all other responses incld wanted then;
label pregnunwanted = 'planning status of pregnancy';
```

```
priortryexp
```

```
*prior medical expense;
priortryexp = .;
if q804 in (., 98) and q818 in (., 98) then priortryexp = .;
else if q804 ne . and q818 = . then priortryexp = q804;
else if q804 = . and q818 ne . then priortryexp = q818;
else if q804 ne . and q818 ne . then priortryexp = max (q804, q818);
label priortryexp = 'amount of money spent on treating earlier attempts on
termination';
```

```
probsfup
```

```
***any persisting problems? ALL THE RESPONDENTS WHO HAVE ANSWERED SAY THEY
HAVE PROBLEMS. THE REST HAVEN'T ANSWERED***;
probsfup = .;
if F702a = . and F702b = . and F702c = . and F702d = . and F702e = . and
F702f = . and F702g = . and F702h = . and F702i = . and F702j = . and F702k =
. and F702l = .
and F702m = . then probsfup = .;
else if F702a = 1 or F702b = 1 or F702c = 1 or F702d = 1 or F702e = 1 or
F702f = 1 or F702g = 1 or F702h = 1 or F702i = 1 or F702j = 1 or F702k = 1 or
F702l = 1
or F702m = 1 then probsfup = 1; *yes;
else probsfup = 0; *no;
label probsfup = 'lingering health problems after initial interview Y/N';
```

```
provrptsev
```

```
****severity of complications from provider's module****;
provrptsev = .;
if p207a = . and p207b = . and p207c = . and p207d = . and p207e = . and
p207f = . and p207g = . and p207h = . and p207i = . and p207j = . and p207k =
. then provrptsev = .;
else if sepsis = 1 or pelvicinfect = 1 or shock = 1 or peritonitis = 1 or
injuryorgans = 1 then provrptsev = 1;
else provrptsev = 0;
```

```
rbasicfup
```



```

rbasicsfup = .;
if watersource = . and toiletype = . and electricity = . then RbasicsFup =
.;
else rbasicsfup = sum (watersource, toiletype, electricity);
label rbasicsfup = 'index of basic necessities of life in follow up survey';

recdhel p
*received help from others?;
recdhel p = .;
if q812 in (., 98) and q824 in (., 98) then recdhel p = .;
else if q812 = 1 or q824 = 1 then recdhel p = 1; *yes;
else recdhel p = 0; *no;
label recdhel p = 'received help from others due to loss of productivity';

totrentsavmth
*fuzzy earnings/savings variable since it is not clear if the rent money is
income or going into savings;
totrentsavmth = .;
if getrent = 1 or savings = 1 then totrentsavmth = sum (q418d, q420);
label totrentsavmth = 'total money from 1 mth rent plus savings';

rentshare
*rent or sharecrop to others;
rentshare = 1;
if q507a in (., 98) then rentshare = .;
else if q507a > 0 then rentshare = 1;
else rentshare = 0;
label rentshare = 'owner rents or sharecrops land Y/N';

rtotincome
if noincome = 0 then rtotincome = totincome;
label rtotincome = 'recoded total income variable';

sepsis1
*sepsis/peritonitis code;
sepsis1 = .;
if p207a = 1 or P207b = 1 or P207e = 1 or p207f = 1 or p207g = 1 then sepsis1
= 1;
else sepsis1 = 0;
label sepsis1 = 'evidence of sepsis or peritonitis';

wealthinxex
*first pass at a composite SES variable -- may not be useful anymore;
wealthinxex = .;
if blanket = . and shoes = . and ntoilet = . and electric = . and newradio =
. and cassette = . and tv = . and cellph = . and landl = . and
fridge = . and ntable = . and sofa = . and nbed = . and cboard = . and nclock
= . and cartr = . and savings = . then wealthinxex = .;
else wealthinxex = SUM (blanket, shoes, ntoilet, electric, newradio,
cassette, tv, cellph, landl, fridge, ntable, sofa, nbed, cboard, nclock,
cartr, savings);
label wealthinxex = 'Wealth index obtained by summing across assets';

compseverity
compseverity = .;
if complsevrbleed = . and fever = . and painseverity = . and complsevrijury
= . then compseverity = .;
compseverity = max (complsevrbleed, fever, painseverity, complsevrijury);
label compseverity = 'how severe are the complications';

complsevrscal e
***create a severity scale***;
complsevrscal e = .;
if provrptsev = . then complsevrscal e = .;

```

```

else if shock = 1 or injuryorgans = 1 or abdosurgery = 1 then complsevrscle
= 1; *very severe;
else if sepsis = 1 or pelvicinfect = 1 or peritonitis = 1 or gestatfetus = 3
then complsevrscle = 2; *medium severe;
else if gestatfetus = 2 and bloodtrans = 1 then complsevrscle = 2; *medium
severe;
else complsevrscle = 3; *less severe;
label complsevrscle = 'severity scale for severe, moderate, mild
complications';

```

```

sizerentshare
*size of landholding rented/sharecropped out;
sizerentshare = .;
if q507a in (.,98) then sizerentshare = .;
else if q507a = 0 then sizerentshare = 0; *nothing rented out sharecropped
out;
else if q507a <= 2.47 then sizerentshare = 1; *under 2.47 acres;
else if q507a > 2.47 and q507a <= 4.94 then sizerentshare = 2; *bw 2.47 and
4.94 acres;
else if q507a > 4.94 and q507a <= 24.7 then sizerentshare = 3; *bw 4.94 and
24.7 acres;
else sizerentshare = 4; *>24.7 acres;
label sizerentshare = 'size of land rented out or sharecropped out';

```

```

pctsuppexp
if medexp ne 0 then pctsuppexp = suppexp/medexp; *label pctsuppexp =
'supplies expense as a proportion of total expense';

```

```

proptestexp
if medexp ne 0 then proptestexp = testexp/medexp; *label proptestexp = 'test
expense as a proportion of total expense';

```

```

timefacnites
***new construction of time spent in facility based on emails with SS;
timefacnites = .;
if q902a = . and q902b = . then timefacnites = .;
else if (0 < q902a < 24) or q902b < 1 then timefacnites = 1; *0 nights --
likely outpatient;
else if q902a = 24 or q902b = 1 then timefacnites = 2; *1 night;
else if (24 < q902a <= 48) or q902b = 2 then timefacnites = 3; *more than 1,
but less than 2 nights;
else if (48 < q902a <= 72) or q902b = 3 then timefacnites = 4; *more than 2,
but less 3 nights;
else if (72 < q902a <= 96) or q902b = 4 then timefacnites = 5; *more than 3
but less than 4 nights;
else if q902a > 96 or q902b > 4 then timefacnites = 6; *more than 4 nights;
label timefacnites = 'recoded time spent in health facility';

```

```

timeill
timeill = .;
if q901a = . and q901b = . then timeill = .;
else if (0 < q901a <= 7) or q901b = 1 then timeill = 1; *a week or less;
else if (q901a > 7 and q901a <=14) or q901b = 2 then timeill = 2; *1-2 weeks;
else if (q901a > 14 and q901a <=21) or q901b = 3 then timeill = 3; *2-3
weeks;
else if (q901a > 21 and q901a <=30) or q901b = 4 then timeill = 4; *3-4
weeks;
else timeill = 5; *more than a month;
label timeill = 'time spent being ill, in weeks';

```

```

inclostell
inclostell = .;
if amtlost = . and amtlosth = . then inclostell = .;
else inclostell = sum (amtlost, amtlosth);

```

```

label inclostall = 'total income lost by people in the hh';

newdebt
***debt***;
***combine with the debt variable from the initial wave***;
newdebt = .;
if debtttype in (1, 2, 3) then do;
    if F603 = . then newdebt = .;
    else if F603 = 2 then newdebt = 1; *no additional debt over what was
taken previously;
    else if F603 = 1 and F605 = 1 then newdebt = 2; *additional loan taken
for treatment;
    else if F603 = 1 and F605 = 2 then newdebt = 3; *additional loan taken
but not for treatment;
end;
if debtttype = 0 then do;
    if F603 = . then newdebt = .;
    else if F603 = 2 then newdebt = 4; *no loan now or before;
    else if F603 = 1 and F605 = 1 then newdebt = 5; *new loan taken for
treatment;
    else if F603 = 1 and F605 = 2 then newdebt = 6; *new loan taken but not
for treatment;
end;

totexpbiz
*total other expenses incurred in running business';
totexpbiz = .;
if q516 in (., 98) and q526 in (., 98) and q536 in (., 98) then totexpbiz = .;
else totexpbiz = sum (q516, q526, q536);
label totexpbiz = 'total expenses incurred in running all the businesses';

totfupexp
totFUPexp = SUM (totmedexp, priortryexp);

totinitexp
totinitexp = SUM (medexp, priortryexp);

totmedexp
***sum of all medical expenses in initial and follow up***;
totmedexp = SUM (medexp, medexpFUP);
label totmedexp = 'total amount spent on medical expenses initial and follow
up surveys';

totmthexp
/***total monthly expenses***/
totmthexp = SUM(foodepmth, othreqexp, mthlivexpindex, mthdiscexp);
label totmthexp = 'monthly expenses on food and nonfood items';

totmthfdexp
/***total monthly expenses on food and essential nonfood items***/
totmthfdexp = SUM (foodepmth, othreqexp);
label totmthfdexp = 'monthly expenses on food and essential nonfood items';

totmthfdexpfup
/***total monthly expenses on food and essential nonfood items***/
totmthfdexpfup = SUM (foodepmthfup, othreqexpfup);
label totmthfdexpfup = 'monthly expenses on food and essential nonfood items
-- FOLLOW UP SURVEY';

totpaid
*total paid to the employees;
totpaid = .;
if q515 in (., 98) and q525 in (., 98) and q535 in (., 98) then totpaid = .;
else totpaid = sum (q515, q525, q535);

```

```

label totpaid = 'total amount paid to employees in the last month';

totspend
*total expenditure - salaries and other expenses;
totspend = .;
if totpaid = . and totexpbiz = . then totspend = .;
else totspend = sum (totpaid, totexpbiz);
label totspend = 'total salary and other expenses from businesses';

uablwork
uablwork = .;
if (q803 = . or q803 = -8) and (q816a = . and q816a = -8) then uablwork = .;
else if q803 = 1 or q816a = 1 then uablwork = 1; /*yes unable to work*/
else uablwork = 0; /*no, able to work*/
label uablwork = 'unable to work cos of health';

pipewater
pipewater = .;
if q406a in (-8, 98, .) then pipewater = .;
else if q406a = 1 then pipewater = 1; /*potable piped water*/
else if q406b ne . and q406a > 1 then pipewater = 0; /*no piped water into
home*/

decidenonfarminc
*non farm business control -- does the respondent have any say;
decidenonfarminc = .;
if q518a = . and q528a = . and q538 = . then decidenonfarminc = .;
else if q518a in (1, 2, 3) or q528a in (1, 2, 3) or q538 in (1, 2, 3) then
decidenonfarminc = 1; /*respondent has some say*/
else decidenonfarminc = 0; /*respondent has no say*/
label decidenonfarminc = 'who decides how nonfarm income will be spent';

incwkresp
incwkresp = .;
if indexwk = 1 and indexmth = 1 then incwkresp = .;
else incwkresp = q542d;
label incwkresp = 'weekly income of wage workers adjusted for overlaps with
monthly income category';

timelost
timelost = .;
if timelostab = . and timelostmisc = . then timelost = .;
else if uablwork = 0 then timelost = 0; *no time lost;
else if timelostab = 1 or timelostmisc = 1 then timelost = 1;
else if timelostab = 2 or timelostmisc = 2 then timelost = 2;
else if timelostab = 3 or timelostmisc = 3 then timelost = 3;
else if timelostab = 4 or timelostmisc = 4 then timelost = 4;
else if timelostab = 5 or timelostmisc = 5 then timelost = 5;
label timelost = 'productive time lost due to termination attempts, in

timelostab
timelostab = .;
if q803a = . and q803b = . then timelostab = .;
else if (0 < q803a <= 7) or q803b = 1 then timelostab = 1;
else if (7 < q803a <=14) or q803b = 2 then timelostab = 2;
else if (14 < q803a <=21) or q803b = 3 then timelostab = 3;
else if (21 < q803a <=30) or q803b = 4 then timelostab = 4;
else timelostab = 5; *more than a month;
label timelostab = 'productive time lost due to termination attempts, in
weeks - induced abortion';

timelostmisc
timelostmisc = .;

```

```

if q816b = . and q816c = . then timelostmisc = .;
else if (0 < q816b <= 7) or q816c = 1 then timelostmisc = 1; *a week or
less;
else if (7 < q816b <=14) or q816c = 2 then timelost = 2; *1-2 weeks;
else if (14 < q816b <=21) or q816c = 3 then timelostmisc = 3; *2-3 weeks;
else if (21 < q816b <=30) or q816c = 4 then timelostmisc = 4; *3-4 weeks;
else timelostmisc = 5; *more than a month;
label timelostmisc = 'productive time lost due to termination attempts, in
weeks - miscarriage';

```

wrk1chg

\*\*\*\*\*respondents wage work changes\*\*\*\*\*;

wrk1chg = .;

if occupresp = 2 then do;

if F552 = . then wrk1chg = 99; \*valid before invalid now;

else if F552 = 3 then wrk1chg = 1; \*same as before;

else if F552 = 2 then do;

if F553a = . then wrk1chg = 98; \*work less, but no idea why;

else if F553a in (1, 2) or F553a1 = 2 then wrk1chg = 2; \*worked

less due to illness;

else if F553a1 ne 2 then wrk1chg = 3; \*worked less but not due to

illness;

end;

else if F552 = 1 then do;

if F553b = . then wrk1chg = 98; \*work more, but no idea why;

else if F553b in (1, 2) or F553b1 = 2 then wrk1chg = 4; \*worked

more due to illness;

else if F553b1 ne 2 then wrk1chg = 5; \*worked more but not due to

illness;

end;

end;

if occupresp ne 2 then wrk1chg = 6; \*not applicable;

wrk2chg

\*\*\*husbands wage work changes \*\*\*;

if occuphusb = 1 then do;

if F562 = . then wrk2chg = 99; \*valid before invalid now;

else if F562 = 3 then wrk2chg = 1; \*same as before;

else if F562 = 2 then do;

if F563a = . then wrk2chg = 98; \*work less, but no idea why;

else if F563a in (1, 2) or F563a1 = 2 then wrk2chg = 2; \*worked

less due to illness;

else if F563a1 ne 2 then wrk2chg = 3; \*worked less but not due to

illness;

end;

else if F562 = 1 then do;

if F563b = . then wrk2chg = 98; \*work more, but no idea why;

else if F563b in (1, 2) or F563b1 = 2 then wrk2chg = 4; \*worked

more due to illness;

else if F563b1 ne 2 then wrk2chg = 5; \*worked more but not due to

illness;

end;

end;

if occuphusb ne 1 then wrk2chg = 6; \*not applicable;