Data Set Method Appendix

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1 Set-up of 2009 CPS March Supplement

Create nuclear family ID's and assign any children 14 or younger in the household to the nuclear family regardless of whether or not they are coded as children (a_famrel=3).

Assign original insurance types

Medicaid: If caid=1 or mcaid=1 or othstyp1=2 or othstyp2=2 or othstyp3=2 or othstyp4=2

or othstyp5=2 or othstyp6=2

Medicare: If care=1 or mcare=1 or othstyp1=1 or othstyp2=1 or othstyp3=1 or othstyp4=1

or othstyp5=1 or othstyp6=1

ESI - Own Name: If hiemp=1 or hi=1 or othstyp1=10 or othstyp2=10 or othstyp3=10

or othstyp4=10 or othstyp5=10 or othstyp6=10

ESI - Dependent: If dephi=1 or othstyp1=11 or othstyp2=11 or othstyp3=11 or othstyp4=11

or othstyp5=11 or othstyp6=11

ESI - Any Source: If emphidep=1 or emphiown=1

ESI - Family: If hityp=1 ESI - Single: If hityp=2

Individual - Own Name: If (hiown=1 and emphiown=0) or (othstyp1=12 or othstyp2=12

or othstyp3=12

Individual - Dependent: If depriv=1 or (othstyp1=13 or othstyp2=13 or othstyp3=13 or othstyp4=13

or othstyp5=13 or othstyp6=13)

Individual any source: If indown=1 or inddep=1
Any Private: If indany=1 or emphiany=1

CHAMPUS: If OTYP_1=1 or othstyp1=3 or othstyp2=3 or othstyp3=3 or othstyp4=3

or othstyp5=3 or othstyp6=3

CHAMPVA: If OTYP_2=1 or othstyp1=4 or othstyp2=4 or othstyp3=4 or othstyp4=4

or othstyp5=4 or othstyp6=4

VA: If OTYP_3=1 or othstyp1 in (5.6) or othstyp2 in (5.6) or othstyp3 in (5.6) or othstyp4 in (5.6)

or othstyp5 in (5,6) or othstyp6 in (5,6)

IHS: If OTYP_4=1 or othstyp1=8 or othstyp2=8 or othstyp3=8 or othstyp4=8

or othstyp5=8 or othstyp6=8

Other Military: If OTYP_5=1

Any Military Health: If champus=1 or champva=1 or va=1 or othmilhi=1

Medicaid/SCHIP Plans: If medicaid=1 or othstyp1=7 or othstyp2=7 or othstyp3=7 or othstyp4=7 or othstyp5=7

or othstyp6=7 or indianhi=1

Uninsured: If medicaid=1 or medicare=1 or emphiany=1 or privary=1 or anymilhi=1

or medschip=1 then not uninsured

Any Public Plan: If medicare=1 or medicaid=1

NOTE: If a person was given ESI - own name coverage and did not have a value to indicate if the coverage was for a family or single then the person was given whatever coverage they had besides ESI. None of these people were uninsured and they were coded as having ESI from the other coverage variables.

Assign Health Insurance Hierarchy - Can Only Have One Type of Coverage

- 1. Employer Health Insurance Own Name
- 2. Employer Health Insurance As a Dependent
- 3. Any Public Health Insurance
- 4. Individual Insurance Own Name
- 5. Individual Insurance As a Dependent
- 6. Uninsured

Assign FPL categories (based on 2008 FPL and family income)

- 1. Under 100;
- 2. 100-150;
- 3. 150-200;
- 4. 200-300;
- 5. 300-400; and
- 6.400+

Created a person type variable (PER_TYPE):

This variable is based on the variable hhdfmx (detailed family relationship to ref person of household). This method was verified by checking that there was no crossover between families and sub-families. People related to the householder that are not the spouse/children (per_type=4) are treated as single when coverage is assigned.

- 1. if hhdfmx=1 then per_type=1
- 2. else if hhdfmx=2 then per_type=2
- 3. else if hhdfmx in(4,7,9,12,25,29,31,34,31) then per_type=3
- 4. else if hhdfmx in(37,40,42,45,49,50,51) then per_type=4
- 5. else if hhdfmx in(3,5,8,10,23,26,30,32,35,38,41,43) then per_type=1
- 6. else if hhdfmx in(6,11,27,33,39,44) then per_type=2
- 7. else if hhdfmx in(24,36) then per_type=3
- 8. else if hhdfmx=46 then per_type=1
- 9. else if hhdfmx=47 then per_type=2
- 10. else if hhdfmx=48 then per_type=3

To simplify this assignment, 4 variables were created:

- 1. if per_type=1 then head=1
- 2. else if per_type=2 then spouse=1

- 3. else if per_type=3 then child=1
- 4. else if per_type=4 then other=1 (THESE PEOPLE ARE TREATED AS IF THEY ARE SINGLE WHEN COVERAGE ASSIGNED)

Generated variables for the size of the nuclear family and for the number of uninsured children under the age of 27 in the nuclear family.

2 Set-up of 2009 CPS Basic Files - March, April, May and June

Data set was deduped by variables: hrhhid hrmis gesteen pulineno prfamnum pesex ptdtrace (NOTE: These variables are used to merge the basic monthly file information to the march supplement.)

Assigned hourly wage rates and hours worked (weekly):

- 1. If a value existed for pehrusl1 then hours worked calculated by summing pehrusl1 and pehrusl2
- 2. Otherwise if a value existed for peernhro then hours worked set to peernhro
- 3. Otherwise if values existed for prernwa and prernhly then hours worked calculated by (prernwa/prernhly)
- 4. Otherwise if values existed for prernwa and peernh10 then hours worked calculated by (prernwa/peernh10)
- 5. Otherwise hours could not be assigned.
- 6. If a value existed for prernhly then hourly wage set to prernhly
- 7. Otherwise if a value existed for peernh10 then hourly wage set to peernh10
- 8. Otherwise if values existed for prernwa and hours worked hourly wage calculated by (prernwa/hours worked)
- 9. Otherwise wage could not be assigned.

NOTE: Anyone with missing wages or hours was removed from the data set.

3 Set-up March Supplement for Merge to the Basic Files

Limited data set to:

1. $17 \le AGE \le 64$

- 2. Those employed at work (pemlr=1)
- 3. Private sector workers (peio1cow = 4 or 5)

Note: The weight variable provided on the march supplement file was weighted up so that out sample was representable of the US population after individuals were dropped due to merging issues (see the note above regarding the final sample in Section 4).

4 Merge of March Supplement to the Basic Files

Merged by hrhhid hrmis gestcen pulineno prfamnum pesex ptdtrace. If age differed on the merge by more than one year the observation was removed. If hourly wage/hours worked could not be retrieved from the basic files the observation was removed from the data set.

NOTE: The final sample consists of private sector workers ages 17 to 64 years who were interviewed in the March 2009 Current Population Survey (CPS). We restrict the sample to those with wage data available in the Outgoing Rotation Group questionnaire of March, April, May or June CPSs of 2009, and whose firm size was non missing. We lost 302 observations out of an initial 64,046 due to improper merge results, 75 observations due to missing hours, 26,897 observations due to lack of wage data, and 649 observations due to missing firm size. The lowest wage in the final sample is \$0.75 per hour. Persons with less than \$25 in weekly earnings were removed from the final sample as well (these observations are included in the improper merge results above). The 26,897 observations lost due to missing wage information were investigated and it was found that 53,133 observations were obtained from the CPS basic files for people in the outgoing rotation group. This immediately removes 10,913 observations (64,046-55,133) and the other 15,984 missing observations were due to persons only reporting their weekly earnings and nothing else.

5 Assigning Hours, Wage, and Firm Characteristics

Part-Time workers vs. Full-Time Workers

- 1. Full-time if hours worked were greater than or equal to 30
- 2. Part-time if hours worked were less than 30

Assigned wage categories.

- 1. 0 < wage < 6.50
- 2. $6.50 \le wage < 7.25$

- 3. $7.25 \le wage < 10.25$
- 4. $10.25 \le wage \le 13.50$
- 5. wage > 13.50

Assigned firm size categories.

- 1. <10
- 2. 10-24
- 3. 25-99
- 4. 100-999
- 5.1000 +

NOTE: If firm size was missing the observation was removed from the data set

Assigned "artificial head" to families whose reference person was removed. This was done by assigning the spouse as the head (if there was a spouse in the family), otherwise a DV was created to indicate the family consisted only of other working family members between the ages of 17 and 64. If a spouse was assigned as the head of the family they were no longer considered a spouse for coverage assignment due to the health reform law. After the assignment of an "artificial head" a variable was created to indicate that a family did not have a spouse.

Merged on minimum wage data from January 2008 to the data set. Merged FPL data from 2008 (different values for AK and HI) to the data set. Merged employer and employee contributions to ESI by state and coverage type (family/single) to the data set from AHRQ MEPS-IC summary tables.

Created flags for 133% FPL and below and 400% FPL and below based on 2008 FPL and family size.

Merged Medicaid expenditures by state to the data set.

The employer mandate applies only to large firms (>50 FTE's). The CPS only asks for number of workers (not FTE's) so the assumption is made that half (1/2) the firms in the 25-99 workers category have >50 FTE's. And it is assumed that all firms with 100 or more employees have >50 FTE's. Firms assumed to have >50 FTE's are assigned as large firms and are subject to the employer mandate. All other firms are assigned as small firms and are not subject to the employer mandate. The method for assigning half of the firms in the 25-99 category to large firms and the other half to small firms was done by generating a random uniform variable (0,1) for observations in the firm size 25-99 category, and all observations for which the random uniform variable was greater than .5 were assigned to large firms, otherwise the observation was assigned to a small firm.

6 Setting Data Set up for Direct Access to the Person Based on the Family to Assign Coverage

The data is sorted by the nuclear family identifier (famseq), the person type (per_type) and the person identifier (peridnum). Then the program loops through the family members and assigns a variable "start" to indicate the first observation number of the family, and a variable "finish" to indicate the last observation number of the family. For example, if the family has 5 observations in the data and the first observation is 47, then the last observation is 51. All five members of the family are assigned the value 47 for start and the value 51 for finish. Since the data is also sorted by person type, the first observation for the family will be the head (if the family has a head), then the spouse (if the family has a spouse), and then all other persons. The data is also sorted by person ID so that the following direct access steps can be looped through each individual in the family.

A varibale is created (for ease of programming language) to indicate if someone has coverage other than ESI in own name and not uninsured. That is, if uninsured is not equal to 1 and family coverage is not equal to 1 and single coverage is not equal to 1 then any other coverage is equal to 1. This includes ESI as a dependent, individual coverage (own name and dependent), and public coverage (all sources).

7 Assigning Coverage Due to Health Reform Law (Direct Access Loop)

A direct access loop takes each individual observation from the data and sets it on each family member (based on the variables start and finish), this then allows for the comparison of coverage for one family member to all other family members. If any of the logic listed below is met the program is instructed to leave the direct access loop (via the "leave" command) and the person is assigned the coverage given by the logic and no other family members are looked at by the program.

Coverage is first assigned to the heads (per_type=1) of families with either only one person on the data set or no spouse in the family. If the person is uninsured, in a large firm, and a full-time worker (uninsured and in a firm which the employer mandate applies) and the person has uninsured family members (not on the data set) then the person is assigned ESI family coverage (and uninsured is set to 0). Otherwise if the person is uninsured and in a firm which the employer mandate applies and they do not have uninsured family members they are assigned ESI single coverage. Otherwise they are assigned to whatever

coverage they had originally (including uninsured).

Next, coverage is assigned for children (per_type=3) over the age of 26 (> 26) and families that do not have a head. If the person is uninsured and in a firm which the employer mandate applies then they are assigned ESI single coverage. Otherwise they are assigned to whatever coverage they had originally (including uninsured).

NOTE: These persons cannot be assigned family coverage since the are not the head of the household or a spouse of the head. Thus, their coverage assignment to ESI single is independent of whether the family has uninsured family members.

Next, coverage is assigned for other family members (per_type=4). If the person is uninsured and in a firm which the employer mandate applies then they are assigned ESI single coverage. Otherwise they are assigned to whatever coverage they had originally (including uninsured).

NOTE: These persons cannot be assigned family coverage since the are not the head of the household or a spouse of the head. Thus, their coverage assignment to ESI single is independent of whether the family has uninsured family members.

Next, coverage is assigned to the head of the household based on the coverage type of the spouse. This logic only applies if the family has a head and a spouse.

If the head is currently uninsured and is eligible for the employer mandate:

- 1. Spouse currently has family coverage and is in a firm which the employer mandate applies then the head is assigned ESI as a dependent coverage. The spouse will keep their family coverage (to be addressed when coverage is assigned to the spouse). Uninsured other family members under the age of 27 will be assigned ESI as a dependent coverage (to be addressed when coverage is assigned to other family members under the age of 27).
- 2. Spouse currently does not have family coverage and is not uninsured and in a firm which the employer mandate applies and the family has other uninsured family members then then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 3. Spouse currently does not have family coverage and is not uninsured and in a firm which the employer mandate applies and the family does not have other uninsured family members then then the head is assigned ESI single coverage. The spouse will keep whatever coverage they had originally. Uninsured dependents under the age of 27 does not apply.
- 4. Spouse currently has ESI single coverage and the family does not have any other uninsured persons then the head is assigned ESI single coverage.

- The spouse will keep whatever coverage they had originally. Uninsured dependents under the age of 27 does not apply.
- 5. Spouse currently has ESI single coverage and the family has other uninsured persons then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 6. Spouse is currently uninsured then the head is assigned family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents will be assigned ESI as a dependent coverage.
- 7. Spouse currently has any other type of coverage and the family does not have any uninsured dependents then the head is assigned ESI single coverage. The spouse will keep whatever coverage they had originally. Uninsured dependents under the age of 27 does not apply.
- 8. Spouse currently has any other type of coverage and the family has uninsured dependents then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.

If the head currently has ESI single coverage and is eligible for the employer mandate:

- 1. Spouse has ESI family coverage and is in a firm which the employer mandate applies and the family has uninsured dependents then the head is assigned ESI as a dependent coverage. The spouse will keep their family coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 2. Spouse has family coverage and is in a firm which the employer mandate applies and the family does not have any uninsured dependents then the head keeps their ESI single coverage. The spouse keeps their ESI family coverage. Uninsured dependents under the age of 27 does not apply.
- 3. Spouse does not have family coverage and is not uninsured and in a firm which the employer mandate applies and the family has uninsured dependents the the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 4. Spouse does not have family coverage and is not uninsured and in a firm which the employer mandate applies and the family does not have any uninsured dependents the the head is assigned ESI single coverage. The spouse will keep whatever coverage they had originally. Uninsured dependents under the age of 27 does not apply.
- 5. Spouse has ESI single coverage and the family does not have any uninsured dependents the the head keep ESI single coverage. The spouse keeps

- whatever coverage they had originally. Uninsured dependents under the age of 27 does not apply.
- 6. Spouse has ESI single coverage and the family has uninsured dependents then the head is assigned ESI family coverage. The spouse will be assigned to ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 7. Spouse is currently uninsured then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 8. Spouse has any other type of coverage and the family does not have any uninsured dependents then the head keeps ESI single coverage. The spouse keeps whatever coverage they had originally. Uninsured dependents under the age of 27 does not apply.
- 9. Spouse has any other type of coverage and the family has uninsured dependents then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependents coverage.

If the head currently has ESI family coverage and is eligible for the employer mandate:

- 1. Spouse has ESI family coverage and is in a firm which the employer mandate applies then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage. NOTE: A JUDGEMENT CALL IS MADE HERE TO GIVE THE HEAD OF THE HOUSEHOLD FAMILY COVERAGE OVER THE SPOUSE IN THE INSTANCE THAT THEY BOTH HAVE FAMILY COVERAGE.
- 2. Spouse does not have ESI family coverage and is not uninsured and in a firm which the employer mandate applies and the family has uninsured dependents then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 3. Spouse does not have ESI family coverage and is not uninsured and in a firm which the employer mandate applies and the family does not have any uninsured dependents then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 4. Spouse has ESI single coverage and the family does not have any uninsured dependents then the head is assigned ESI family coverage. The spouse will keep their ESI single coverage. Uninsured dependents under the age of 27 does not apply.

- 5. Spouse has ESI single coverage and the family has uninsured dependents then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of will be assigned ESI as a dependent coverage.
- 6. Spouse is currently uninsured then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 7. Spouse has any other type of coverage and the family does not have any uninsured dependents then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 does not apply.
- 8. Spouse has any other type of coverage and the family has uninsured dependents then the head is assigned ESI family coverage. The spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 does not apply.

If the head currently has any other type of insurance (individual or public) and not ESI as a dependent and is eligible for the employer mandate:

- 1. Spouse has ESI family coverage and in a firm which the employer mandate applies and the family has uninsured dependents then the head is assigned ESI as a dependent coverage. The spouse will be assigned ESI family coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 2. Spouse has ESI family coverage and in a firm which the employer mandate applies and the family does not have uninsured dependents then the head is assigned whatever coverage they currently have. The spouse will keep ESI family coverage. Uninsured dependents under the age of 27 does not apply.
- 3. Spouse does not have ESI family coverage and is not uninsured and is in a firm which the employer mandate applies and the family has uninsured dependents then the head is assigned ESI as a dependent coverage. The spouse will be assigned ESI family coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 4. Spouse does not have ESI family coverage and is not uninsured and is in a firm which the employer mandate applies and the family does not have any uninsured dependents then the head is assigned whatever coverage they currently have. The spouse will be assigned whatever coverage they currently have. Uninsured dependents under the age of 27 does not apply.
- 5. Spouse has ESI single coverage and the family does not have any uninsured dependents then the head is assigned whatever coverage they currently

- have. Spouse keep ESI single coverage. Uninsured dependents under the age of 27 does not apply.
- 6. Spouse has ESI single coverage and the family has uninsured dependents then the head is assigned ESI family coverage. Spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 7. Spouse is currently uninsured then the head is assigned ESI family coverage. Spouse will be assigned to ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned to ESI as a dependent coverage.
- 8. Spouse has any other coverage and the family does not have any uninsured dependents then the head will be assigned to whatever coverage they currently have. The spouse will be assigned to whatever coverage the currently have. Uninsured dependents under the age of 27 does not apply.
- 9. Spouse has any other coverage and the family has uninsured dependents then the head is assigned ESI family coverage. The spouse is assigned to ESI as a dependent coverage. Uninsured dependents under the age of 27 are assigned to ESI as a dependent coverage.

If head has ESI as a dependent coverage and is eligible for the employer mandate:

- 1. Spouse has ESI family coverage and is eligible for the employer mandate then the head keeps ESI as a dependent. Spouse keeps ESI family coverage. Uninsured dependents under the age of 27 are assigned to ESI as dependent coverage.
- 2. Spouse has ESI single and the family has no uninsured dependents then the head keeps ESI as a dependent. Spouse keeps ESI single coverage. Uninsured dependents under the age of 27 do not apply.
- 3. Spouse has ESI single coverage and the family has uninsured dependents then the head is assigned ESI family coverage. Spouse will be assigned ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 4. Spouse is uninsured then the head is assigned ESI family coverage. Spouse is assigned to ESI as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.
- 5. Spouse has any other coverage and the family has no uninsured dependents then the head keeps ESI as a dependent coverage. Spouse keeps current coverage. Uninsured dependents under the age of 27 do not apply.
- 6. Spouse has any other coverage and the family has uninsured dependents then the head is assigned ESI family coverage. Spouse is assigned to ESI

as a dependent coverage. Uninsured dependents under the age of 27 will be assigned ESI as a dependent coverage.

If the head is not eligible for the employer mandate:

- 1. Head currently has ESI as a dependent, ESI single, ESI family, individual (any), or public (any) and the spouse qualifies for the employer mandate and the family has uninsured dependents then the head is assigned ESI as a dependent coverage. The spouse is assigned ESI family coverage. Uninsured dependents under the age of 27 are assigned ESI as a dependent coverage.
- 2. Head is currently uninsured and spouse qualifies for employer mandate then the head is assigned ESI as a dependent coverage. Spouse is assigned ESI family coverage. Uninsured dependents under the age of 27 are assigned to ESI as a dependent coverage.
- Otherwise the head is assigned to whatever coverage they currently have (including uninsured)

Now the spouse is assigned coverage based on what the head received due to the health reform law: -This is here as a check to make sure the above spousal assignments are correct.

If the head qualified for the employer mandate:

- 1. Head assigned ESI family coverage then the spouse was assigned ESI dependent coverage.
- 2. Head assigned ESI single coverage then spouse assigned to whatever coverage they currently have.
- Head assigned to ESI as a dependent coverage and originally had dependent coverage then the spouse is assigned to whatever coverage they currently have.
- 4. Head assigned to ESI as a dependent coverage and originally did not have dependent coverage then the spouse is assigned to ESI family coverage.
- 5. Head assigned to either individual (any) coverage or public (any) coverage then spouse is assigned to whatever coverage they currently have.

If the spouse qualifies for the employer mandate and the head did not:

- 1. Head assigned ESI as a dependent then spouse assigned ESI family coverage.
- 2. Otherwise the spouse keeps whatever coverage they have currently (including uninsured). This happens only if both head and spouse do not qualify for the employer mandate.

Next coverage is assigned to children (per_type=3) who are under the age of 27. -Again, this serves as a check to make sure the assignments for these individuals

above is correct.

If the person is a child (per_type=3) and the family has a head and/or spouse and the child is less than 27 years old: NOTE: These children are between the ages of 17 and 64 and are working in the private sector.

- 1. Child is uninsured and either the head or the spouse has ESI family coverage then the child is assigned ESI as a dependent.
- 2. Child is uninsured and eligible for the employer mandate then the child is assigned ESI single coverage.
- 3. Otherwise the child is assigned to whatever coverage they currently have.

8 Coverage Effects due to Employer Mandate, Medicaid Expansion, and Additional Transfers of ESI Coverage to Exchange Coverage

MEDICAID

If workers are at or below 133% FPL and they have ESI in own name then their ESI is taken away and they are assigned Medicaid coverage (public - any). Otherwise, if workers are at or below 133% FPL and did not have ESI, their other coverage (if any) was taken away and they are assigned Medicaid and their wage does not change.

UNINSURED GO TO EXCHANGES

All uninsured persons and their families will go to the exchanges for coverage if exchange coverage premiums fell at or below 10 percent of family income.

DYNAMIC SCENARIO

1. Broad Interpretation

Persons 133-400 percent of FPL assigned to ESI (and not previously uninsured) make a decision whether they would prefer to keep their ESI or go to the exchanges. If the after tax value of the employer and employee premium contribution is greater than the estimated out of pocket premium the employee must pay in the exchange (incorporating any applicable fines) and coverage is deemed unaffordable (the employee premium is greater than 9.5 percent of family income) then the employee will go to the exchange for coverage. Affordability here is based on the type of coverage the employee currently possesses. In this interpretation, affordability for single coverage is based on 9.5 percent of the single coverage premium and affordability for family coverage is based on 9.5 percent of the family coverage premium. Previously uninsured persons (any FPL) that have been assigned ESI will make a decision whether they want to keep ESI, go to

the exchanges or go uninsured. They first choose whether they would prefer ESI or exchange coverage (same as above). They then make a choice between the preferred coverage from the first step and uninsurance. The decision rule here is that these individuals value not having insurance (indicated by their initial choice to not be covered), thus if they are less than 35 years of age they will choose to keep coverage of the amount they expect to pay (in premiums) is less than 15 percent of their family income, and if they are 35 years of age or older the percentage changes to 20 percent of family income. Individuals above 400 percent FPL who were assigned to ESI (and not previously uninsured) will keep ESI since they are not eligible for subsidized coverage in the exchanges. Individuals who changed from ESI to either exchange coverage or uninsurance will have their wage increased by the after tax value of employer provided health insurance (subtracting out any individual fines for the uninsured).

2. Narrow Interpretation

Persons 133-400 percent of FPL assigned to ESI (and not previously uninsured) make a decision whether they would prefer to keep their ESI or go to the exchanges. If the after tax value of the employer and employee premium contribution is greater than the estimated out of pocket premium the employee must pay in the exchange (incorporating any applicable fines) and coverage is deemed unaffordable (the employee premium is greater than 9.5 percent of family income) then the employee will go to the exchange for coverage. Affordability here is based only on single coverage regardless of whether the employee is purchasing family or single coverage. In this interpretation, affordability for single coverage is based on 9.5 percent of the single coverage premium and affordability for family coverage is based on 9.5 percent of the single coverage premium as well. Previously uninsured persons (any FPL) that have been assigned ESI will make a decision whether they want to keep ESI, go to the exchanges or go uninsured. They first choose whether they would prefer ESI or exchange coverage (same as above). They then make a choice between the preferred coverage from the first step and uninsurance. The decision rule here is that these individuals value not having insurance (indicated by their initial choice to not be covered), thus if they are less than 35 years of age they will choose to keep coverage of the amount they expect to pay (in premiums) is less than 15 percent of their family income, and if they are 35 years of age or older the percentage changes to 20 percent of family income. Individuals above 400 percent FPL who were assigned to ESI (and not previously uninsured) will keep ESI since they are not eligible for subsidized coverage in the exchanges. Individuals who changed from ESI to either exchange coverage or uninsurance will have their wage increased by the after tax value of employer provided health insurance (subtracting out any individual fines for the uninsured).

9 Potential Cost Effects

A rough estimate of the cost effects of the Patient Protection and Affordable Care Act was calculated by merging information from 2008 AHRQ summary tables (average cost of ESI by state and coverage type), 2008 Medicaid costs by state, and estimates of premium subsidies in the exchanges by FPL.¹²³ At each step of the reform persons were assigned a cost based on these estimates of employer contributions, Medicaid spending, and exchange subsidies.

10 Further Caveats

There are provisions in the law that current employer plans will need to meet minimum generosity thresholds in order to be considered creditable coverage. We do not model those provisions in our work, although these provisions would serve to increase the total premium of plans that did not meet the threshold, thus adding to the possibility of wage reductions, unemployment possibilities as well as a substitution for subsidized exchange coverage.

Our sample was limited to those workers in the CPS sample who reported wages, as explained in the text and the footnote to Table 1. In unreported tables we recalculated Table 4 without such a limitation. The results were quite similar.

 $^{^1\}mathrm{Exchange}$ premium estimates come from the Kaiser Family Foundation website (http://healthreform.kff.org/SubsidyCalculator.aspx, accessed March 29th 2010, in 2009 terms)

²Medicaid costs by state were accessed from the Medicaid Statistical Information System.

³AHRQ summary tables can be found here:

http://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables_search.jsp?component=2&subcomponent=2