



# Experiences Using an Event History Calendar in the PSID

April Beaulé, Eva Leissou, and Youhong Liu  
The 11th International Blaise Conference  
Annapolis, Maryland  
September 2007



# About the PSID

- Nationally representative sample of 8,000 U.S. families
- Panel survey conducted since 1968
- Survey instrument programmed in Blaise and Visual Basic



# Why use an EHC?

- PSID went from an annual interviewing cycle to an every other year cycle
- Wanted to improve respondent recall over the past two calendar years
- Evidence from experiment between standard Q-list and EHC indicated EHC improved recall



# EHC versus Question List

BC42a

**EMPLOYER: BLOCKBUSTER (June 2006 to Feb 2007)**

How many weeks out of the year did you actually work on this job in 2006, not including any time off that you told me about earlier?

- If R says: "Every week except what I took off", ENTER '97'

Head PY Weeks Worked

Q-List version

R 05 SPR 05 SUM 05 FAL 05 FAL 05 WIN 06 SPR 06 SPR 06 SUM 06 FAL 06 FAL 06 WIN 07 SPR  
R | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR

**Landmark Events**

**Residence**

**Employment Summary**

**Not Working**

Landmark Events    Residence    **Employment**    Not Working    TimeAway

**Employment Data Entry Window**

R 05 SPR 05 SUM 05 FAL 05 FAL 05 WIN 06 SPR 06 SPR 06 SUM 06 FAL 06 FAL 06 WIN 07 SPR  
R | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR

**Not Working Summary**

Smith Brothers

Parmalat

Craftworks

Job# 4

**Starting Time**    **Ending Time**

Year    Season    Month    3rd of Month    Year    Season    Month    3rd of Month

Before-DK    SUM    AUG    First    2005    WIN    DEC    Last    **Current**

Employer    Craftworks

Note

OK  
Cancel  
Delete

EHC version

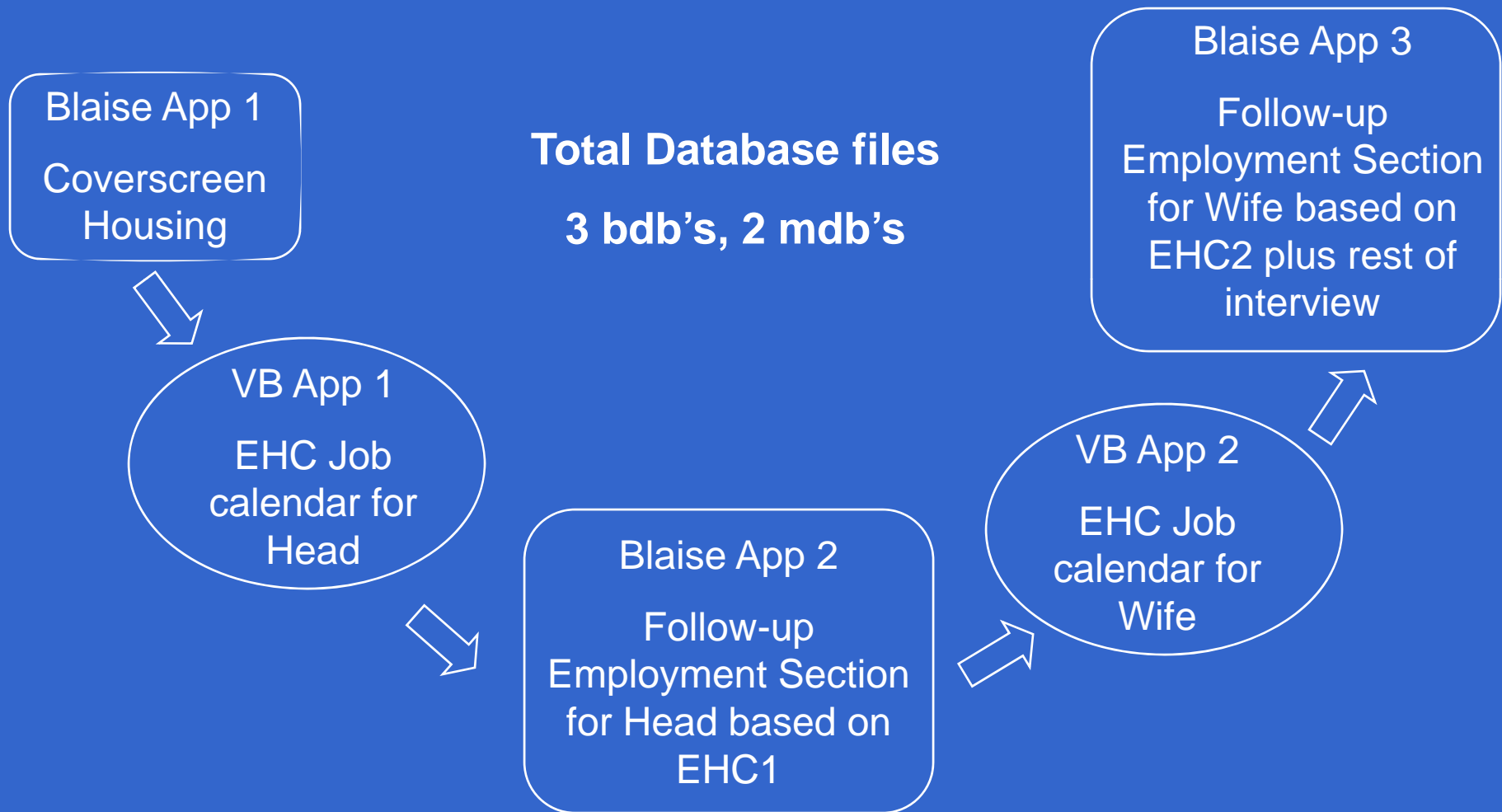


# First Experience with EHC

- Main survey instrument reprogrammed in Blaise
- Employment section programmed as a calendar in Visual Basic
- Limitations prevented the use of DLLs



# Application Design in 2003





# Results First EHC Wave

- Minor problems experienced with the application that passed preload
- EHC did seem to aid respondent recall
- Could not back up to make corrections
- EHC did not have robust consistency checking
- Differing design of EHC provided different variables
- Required hand corrections to reconcile key variables with prior waves



# EHC versus Question List

	AQCASE	CYPSN	CYRTH	CYNAMF	CYNAML	BD78CE70	BD79CE71
1	00015	01	10	AMY	COLLYER	51	035

Q-List version

	CYRTH	CYNAMF	CYNAML	WHICH	BD39M	BD41C	BD45B	BD48C	BD48CE	BD54CE	BD54CEYR
1	10	AMY	COLLYER	1	000011111111	MCKENZIE FINANCIAL	000	05	2000	00	0000
2	10	AMY	COLLYER	2	110000000000	TREEFORT MED CLINIC	016	10	1999	00	0000
3	10	AMY	COLLYER	3	011100000000	LAKE COMMUNITY COLL	020	03	1999	04	2000

	SampleID	JobNu	cEDate	SYear	SSeason	i_sMonth	SMonth	Sby3rd	EYear	ESeason	i_eMon	EMonth	Eby3rd	Employer	Current
1	0004003	1	07/01/2006	2005	SPR	4	APR	First	2006	SUM	7	JUL	First	Smith Brothers	0
2	0004003	2	04/21/2007	2006	SUM	7	JUL	Last	2007	SPR	4	APR	Last	Parmalat	1
3	0004003	3	12/21/2005	B-DK	SUM	8	AUG	First	2005	WIN	12	DEC	Last	Craftworks	0

EHC version



# Multiple Datasets

- Incorporating the EHC required five separate datasets
- Used Blaise bdb and MS Access for EHC
- Required different utilities to import into SAS
- Tools available for Blaise files were not available for EHC



# Interviewer Training

- EHC data entry varies considerably from Q-list data entry
- Data entry is a combination of mouse and keyboard
- Not every question or probe is scripted
- Interviewers trained to use landmarks to anchor other responses as necessary



# Interviewer Training

- Multiple training materials used to reach each type of learner
  - Home study material
  - Demo on DVD
  - Class presentations
  - Hands-on practice
  - Certification



## EHC Round 2

- In spite of difficulties, recognized value of EHC administration for special question series
- Childhood health sequence prime candidate for EHC format
- DLL used to launch EHC (VB calendar) and write data back to bdb



# Programming Logistics

- Programmed a data structure in Blaise to work with the grid in the VB form
- Conditions loaded dynamically based on information in screening section in the DEP sequence
- When calendar is complete, the data are saved back to the bdb
- Also save data to xml file for backup



# Calendar Interface

PSIDEHC

Person: CHRIS, Respondent-Male Head, Age: 38, DOB: 5/27/1970

At what age were you first diagnosed with an Allergic condition? Until what age did you have it?

PROBE: "If you don't know the exact age, please give us your best guess."  
PROBE for age using landmarks, starting with the earliest landmark  
For age at which condition ended: if R says "Still have it" or "Older than 16", CLICK "17+" and enter age

Age	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17+
Parental Separations	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Residential Moves	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
School Changes	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Asthma	0	1	2	1	1	1												17+
Allergic Condition	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Enter Notes

Save

Complete

Exit

Simple Data Entry



# Calendar Interface

Complex Data Entry

PSIDEHC

Person: CHRIS, Respondent-Male Head, Age: 38, DOB: 5/27/1970

At what age were you first diagnosed with **an Allergic condition**? Until what age did you have it?

PROBE: "If you don't know the exact age, please give us your best guess."  
PROBE for age using landmarks, starting with the earliest landmark  
For age at which condition ended: if R says "Still have it" or "Older than 16", CLICK "17+" and enter age

Age	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17+	
Parental Separations	0	1	2	3	4	5													
Residential Moves	0	1	2	3	4	5								13	14	15	16		
School Changes	0	1	2	3	4	5								13	14	15	16		
Asthma	0	1	2	1	1	1								2	13	14	15	16	17+
Allergic Condition	8	8	8	8	8	8	1												17

Enter Notes

Save

Complete

Exit

Cancel DK Start  
Yes DK End  
DK Refused  
DK All Denial



# Processing Challenge

- Calendar portion of the application was pretested and processed without problems
- Early data dumps from the production version had some anomalies with the calendar variables
- Narrowed down the problem to the Blaise to SAS extraction routine



# Note Field in VB Form

PSIDEHC

Person: CHRIS, Respondent-Male Head, Age: 38, DOB: 5/27/1970

At what age were you first diagnosed with **an Allergic condition**? Until what age did you have it?

PROBE: "If you don't know the exact age, please give us your best guess."  
PROBE for age using landmarks, starting with the earliest landmark  
For age at which condition ended: if R says "Still have it" or "Older than 16", CLICK "17+" and enter age

Age	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17+
Parental Separations	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Residential Moves	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
School Changes	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Asthma	0	1	2	1	1	1	1	7				11	12	13	14	15	16	17+
Allergic Condition	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Enter Notes

Save

Complete

Exit

← Note Field allowed interviewers to enter hard returns



# Blaise to SAS Extraction

```
File Edit Format View Help
0060001 2 11
0060131 1 21
0060131 2 11
0060172 1 11
0060172 2 21
0068002 1 21
0068002 2 11He still has it.
0075002 1 116-12 ear
0079001 1 11
0084001 1 21
0084001 2 11
0084002 2 21
0084191 1 11
0084191 2 21
0088311 1 21
0088311 2 11
0088312 1 11
0089001 1 11
0089002 1 11
0089003 1 21
0089003 2 11
0089071 2 11moved every year with mom after father left when he was one year old.
0090001 Also changed schools each year until age 14.

↑ Text data with hard returns was
pushed to next variable
causing misalignment
```

Calendar field that  
allowed for hard  
returns caused  
variable  
misalignment  
during extraction



# Conclusion Interviewer Training

- Easier interviewer training
  - Concepts
  - Interface
- Home study
- In class presentation/practice



# Conclusion Processing

- Using DLL call extremely stable
- Flexibility to back up and make corrections
- Streamlined processing
- Avoided start and stop dates
- Consider restrictions imposed on Blaise field you are writing back to when planning an external application



# Next Steps

- Reprogram the EHC employment calendar in a similar fashion to the childhood health calendar
- Use a DLL to call the employment EHC
- Write EHC data back to the Blaise bdb
- Goal = 1 bmi and 1 dataset!

# Thank You

April Beaulé [abeaule@umich.edu](mailto:abeaule@umich.edu) +001 734-936-0073

Eva Leissou [eleissou@umich.edu](mailto:eleissou@umich.edu) +001 734-647-4449

Youhong Liu [yliu@umich.edu](mailto:yliu@umich.edu) +001 734-647-6172