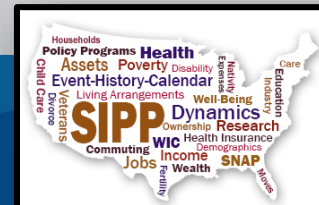


Interviewer Effects: Paradata and Tools for Monitoring in SIPP

Jason Fields, Matthew Marlay, and
Holly Fee
U.S. Census Bureau

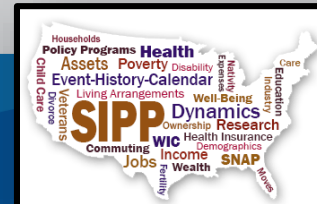
Presented at
IFD&TC
May 2015

This work is released to inform interested parties of ongoing research and to encourage discussion of work in progress. Any views or opinions expressed in the paper are the authors' own and do not necessarily reflect the views or opinions of the U.S. Census Bureau.



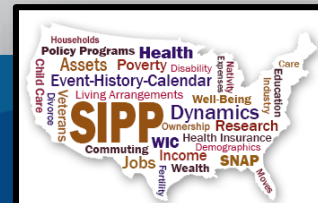
Outline

- Background
 - SIPP Overview
 - Interviews
 - FR Training
- Paradata and Monitoring
 - Certification Test
 - Audit Trails
 - Contact History Instrument (CHI)
 - CARI



SIPP Survey Design

- Sample is multi-stage, stratified sample of the noninstitutionalized, civilian U.S. population
- Sample size 53,000 households
- 4-year panel
- Conducted in waves, each 1 year long
- Four-month interview period



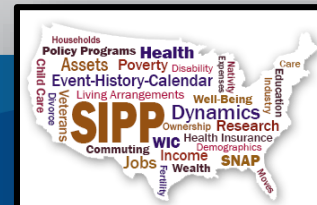
Interviewers

- Used 1,345 field representatives (FRs)
 - ~300 new hires
 - Remainder experienced interviewers
- Sample size was ~53,000 households
- Approximately 40 cases per FR
- Interviews all done in-person
- Yielded just under 30,000 completed cases

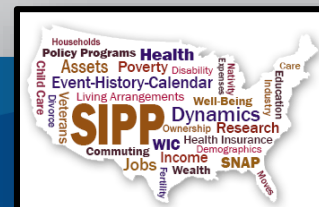
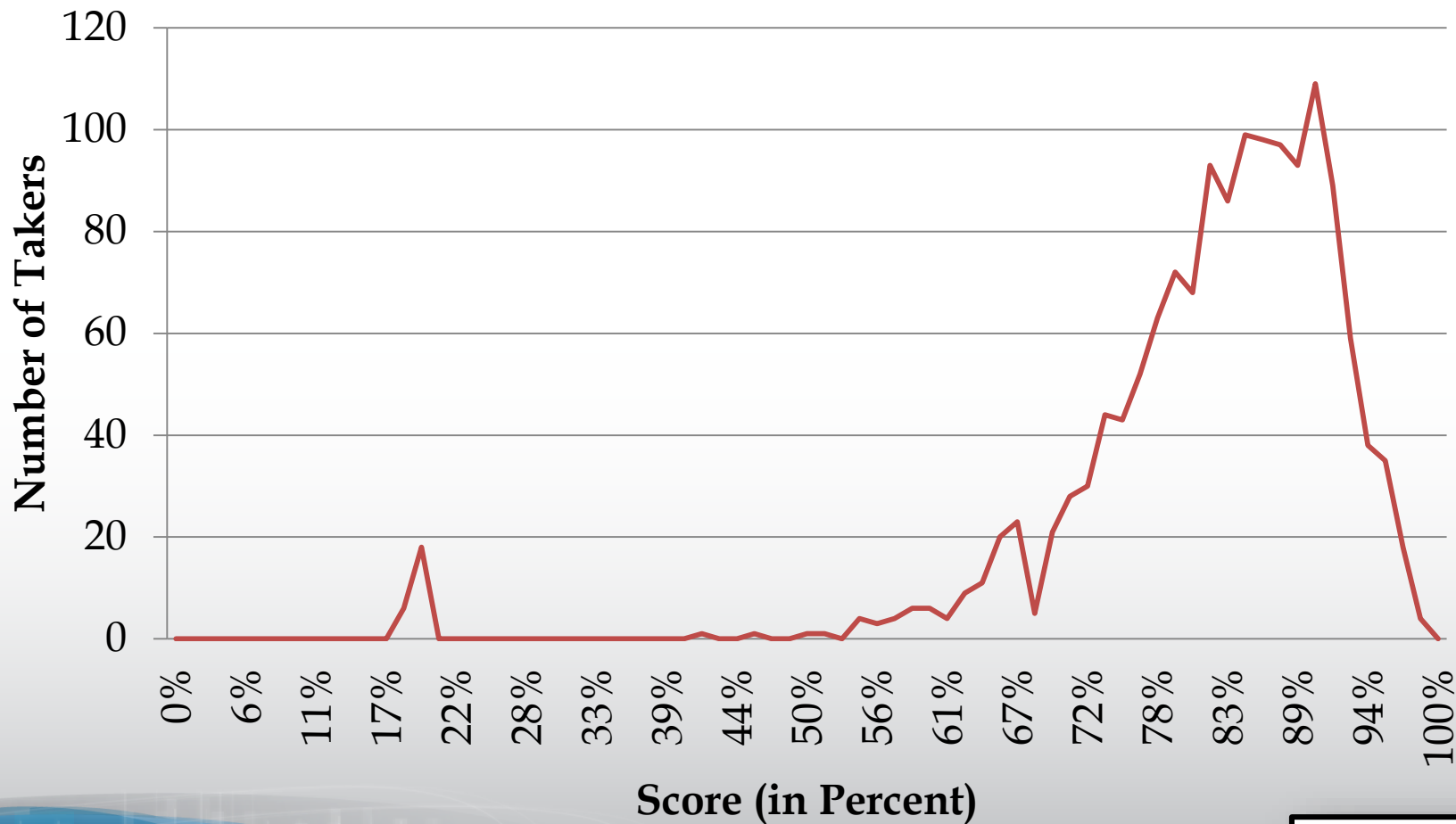


Interviewer Training

- Two-day generic Census training
 - New hires only
 - Covers cross-survey skills
- Four-day classroom training
 - All SIPP FRs
 - Specific to SIPP
- Pre- and post-classroom self-study modules
- Ends with certification test

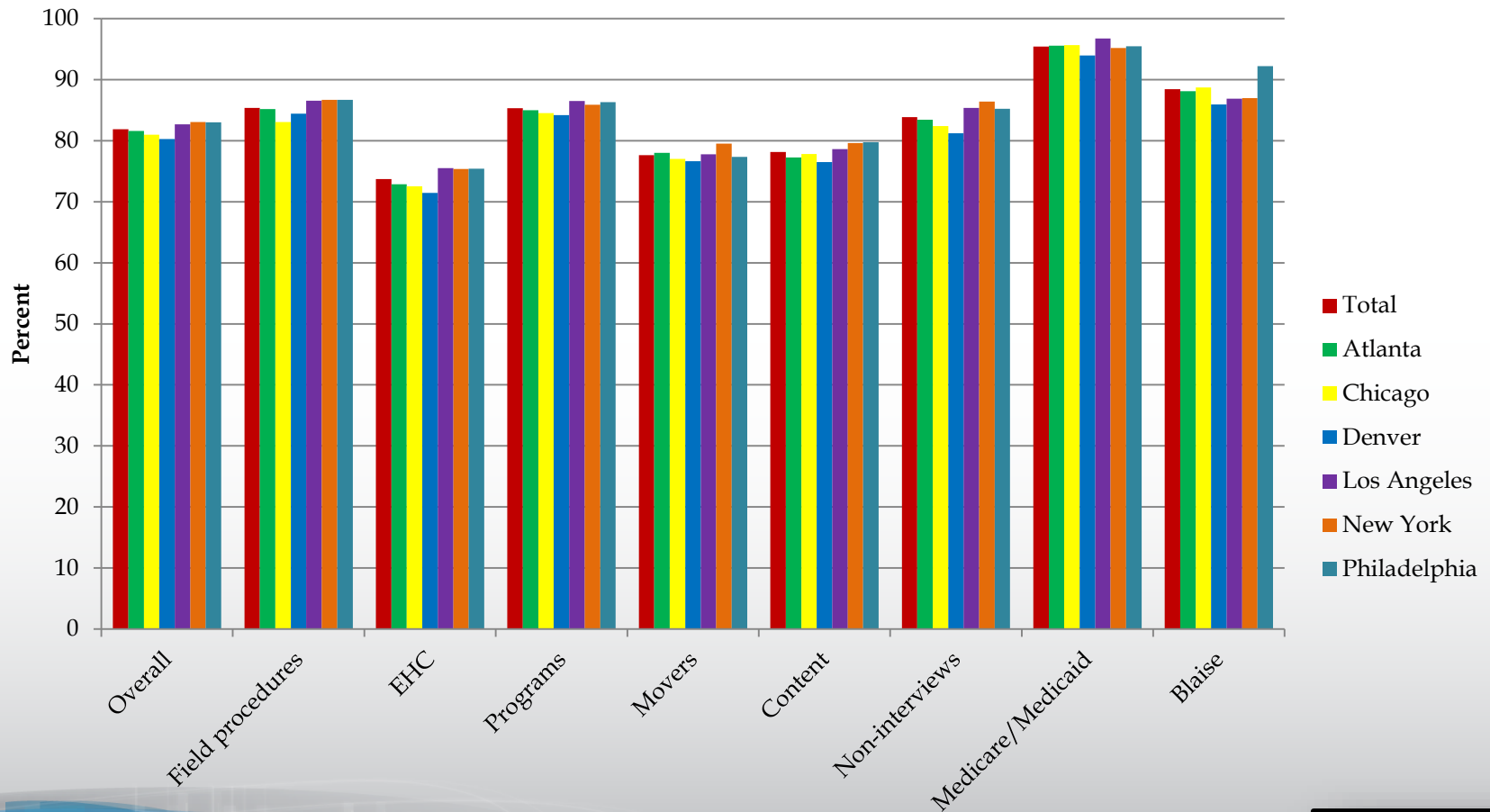


Certification Test

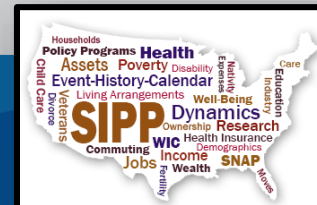


Certification Test

Mean Certification Test Scores by Regional Office

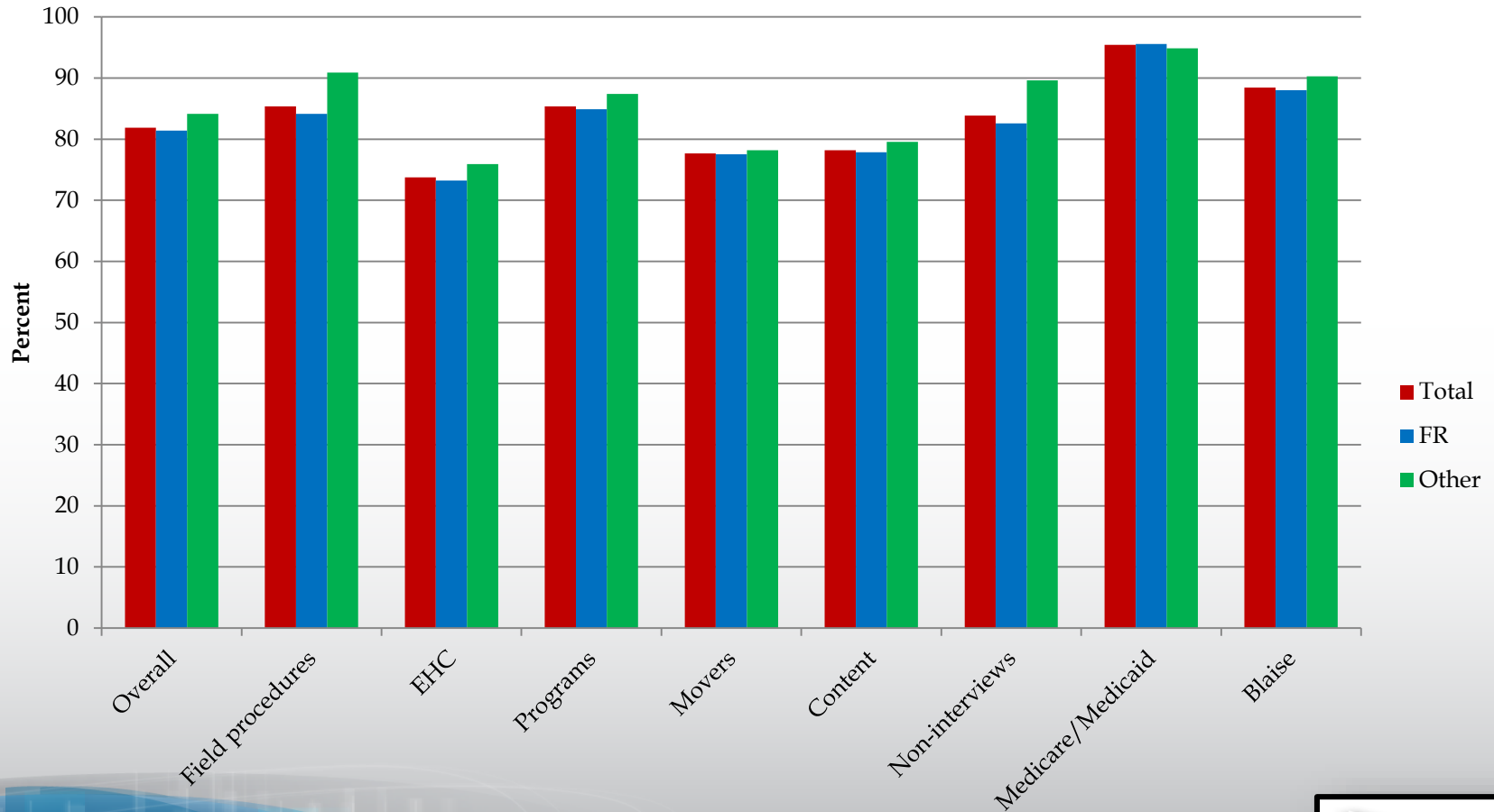


Certification test section

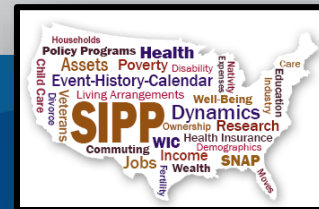


Certification Test

Mean Certification Test Scores by Position

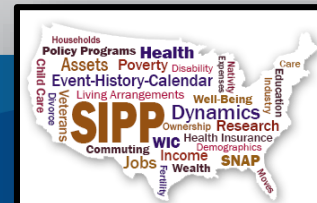


Certification test section



Audit Trails

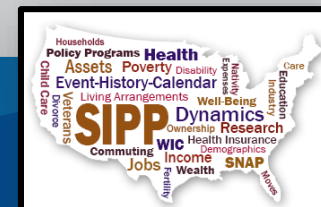
- Audit trail files are a record of all of the keystrokes entered by a field representative (FR) during an interview
- Audit trail files can be used to create paradata on such things as:
 - Section timers,
 - Don't know/refused counts,
 - Help screen calls,
 - Checks encountered,
 - Item-level notes left, and
 - FR navigation throughout the instrument



Audit Trails

Statistics (Completed cases)

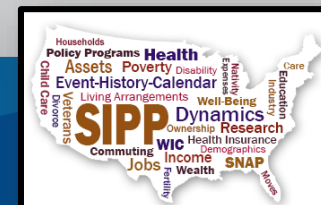
Variables	Total			Range	
	Mean	SD	Median	Min	Max
Don't Know (CTRL+D)	13.33	15.61	9.00	0	214
Refuse (CTRL+R)	4.46	15.60	0.00	0	385
Help Call Screens (F1)	0.37	0.92	0.00	0	24
Field Case Notes (F7)	0.76	2.90	0.00	0	120
Survey Time (in minutes)	102.41	51.89	92.68	6.9	682.73



Audit Trails

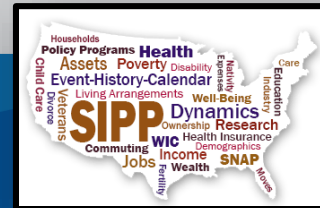
Sample Audit Trail Output

5/19/2012 12:39	Enter Field:BCore_Middle.BJob1[1].KNDWK	Status:Normal	Value:	
5/19/2012 12:39	(KEY:)TEXT[ENTR]			
5/19/2012 12:39	Action:Store Field Data	Field:BCore_Middle.BJob1[1].KNDWK		
5/19/2012 12:39	Leave Field:BCore_Middle.BJob1[1].KNDWK	Cause:Next Field	Status:Normal	Value:TEXT
5/19/2012 12:39	Enter Field:BCore_Middle.BJob1[1].ACTVT	Status:Normal	Value:	
5/19/2012 12:40	(KEY:)TEXT[BACK][BACK][BACK][BACK][BACK]TEXT[BACK]TEXT[ENTR]			
5/19/2012 12:40	Action:Store Field Data	Field:BCore_Middle.BJob1[1].ACTVT		
5/19/2012 12:40	Leave Field:BCore_Middle.BJob1[1].ACTVT	Cause:Next Field	Status:Normal	Value:TEXT
5/19/2012 12:40	Enter Field:BCore_Middle.BJob1[1].UNION	Status:Normal	Value:	
5/19/2012 12:40	(KEY:)2[ENTR]			
5/19/2012 12:40	Action:Store Field Data	Field:BCore_Middle.BJob1[1].UNION		
5/19/2012 12:40	Leave Field:BCore_Middle.BJob1[1].UNION	Cause:Next Field	Status:Normal	Value:2
5/19/2012 12:40	Enter Field:BCore_Middle.BJob1[1].CNTRC	Status:Normal	Value:	
5/19/2012 12:40	(KEY:)2[ENTR]			



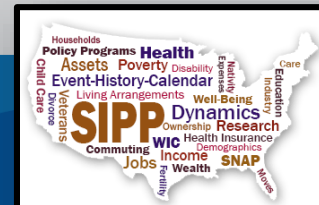
Contact History Instrument

- Keeps a history of every contact attempt for every case
- Collects information about the kind of response received (if contact is made)
 - Reluctant respondent, etc.
- Also collects FR's observation about housing unit/neighborhood conditions



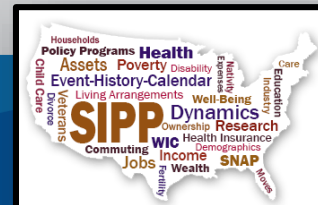
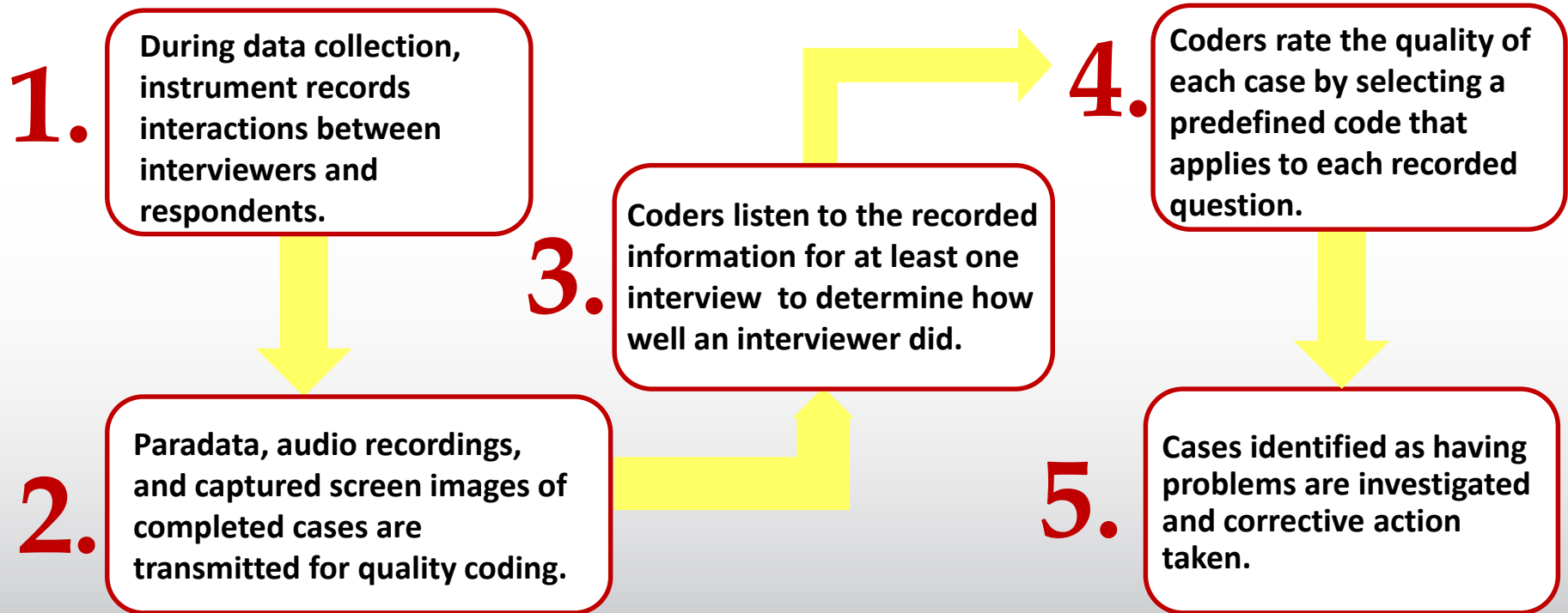
CARI

- Computer-Assisted Recorded Interviewing
- FRs must obtain consent from each respondent to record the interview
- Records interactions between Field Representatives (FRs) and respondents
- The goal of CARI is to ensure the accuracy and quality of data collected
 - Improve the FR's performance
 - Identify difficult or problematic questions



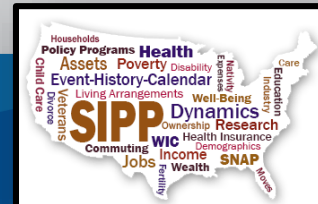
CARI

The Quality Assurance Component in the CARI system can be used to evaluate the quality of completed cases.



CARI

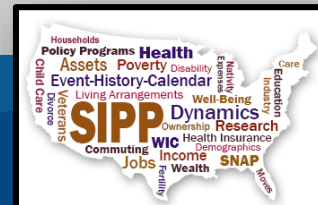
- Helps ensure that data collection is error-free and that FRs act professionally
- Listen to recorded cases and code them for:
 - Authenticity
 - Question administration
 - Behavioral conduct



CARI

We consider data inauthentic when interviewers do not collect them directly from respondent

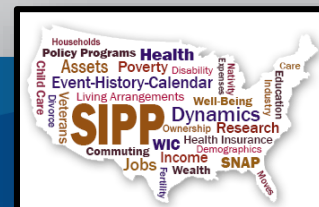
- FRs may feel they already know the answer (and do not confirm it)
- FRs may skip a question
- Occasionally, FRs may fabricate a response entirely



CARI

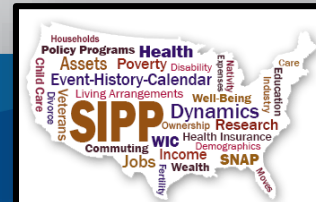
Errors in question administration arise when questions are presented differently

- FRs do not read the questions as worded
- Speed/volume of interviewer's voice does not match respondents'
- FRs do not probe or lead the respondent



CARI

- Behavioral problems arise when the interviewer's conduct is inappropriate for a Census Bureau employee
 - Off-topic personal discussions
 - Overly task-oriented
 - Unfriendly or hostile
- SIPP is dependent on respondents having a good relationship with FRs

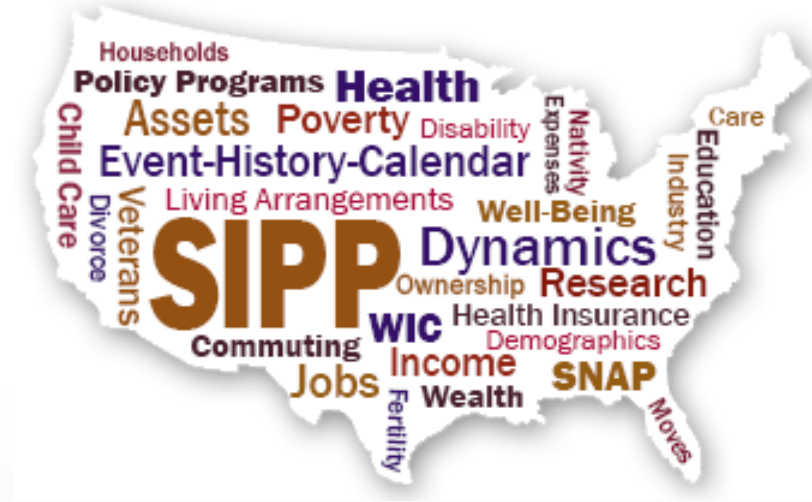


Conclusion

- SIPP (and the Census Bureau more generally) has access to more paradata than we have ever had in the past
- Effective use of this paradata for FR monitoring and performance can help us improve data quality



THANK YOU!



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<http://www.census.gov/sipp>

