

Part 1 - Background and Overview

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1. Background

The Health and Retirement Study (HRS) is a longitudinal panel study that began in 1992. The HRS surveys a representative sample of more than 20,000 people aged over 50 years in America and is supported by the National Institute on Aging (NIA) and the Social Security Administration. The study explores the changes in employment status and the health transitions that individuals undergo toward the end of their work lives and in the years that follow.

Every other year HRS participants are asked to complete an in-depth interview. During the year between interviewing, participants are also asked to complete a mail study or other supplemental survey. Until the most recent wave of data collection (which began in April 2018), interviews were completed in telephone or face to face mode, with respondents alternating between modes each wave. During the face to face interview participants complete a series of anthropometric measures (i.e. body measurements) and bio specimen collection. The telephone interviews are conducted by field interviewers and interviewers in a centralized telephone interviewing facility.

In 2018, web was introduced as a completion mode for around a quarter of participants who were due to be assigned telephone mode. Development work for the new web mode has taken place, top various levels of intensity, over the last five years – intrinsic to this was transitioning the survey to Blaise 5.

2. Introducing a web mode

The introduction of a web as a mode of data collection was primarily for monetary reasons. Funding remained constant, however, work scope and effort needed to maintain high response rates have increased; therefore decisions had to be made about how to reduce costs. One of the agreed methods was to offer web completion as an alternative to telephone.

3. Timeline

The decision to introduce a web mode was made in 2012, at the time HRS was using Blaise 4.8. Due to Blaise 5's ability to handle a multimode survey in one data model, work began to transition the study to Blaise 5 shortly afterwards.

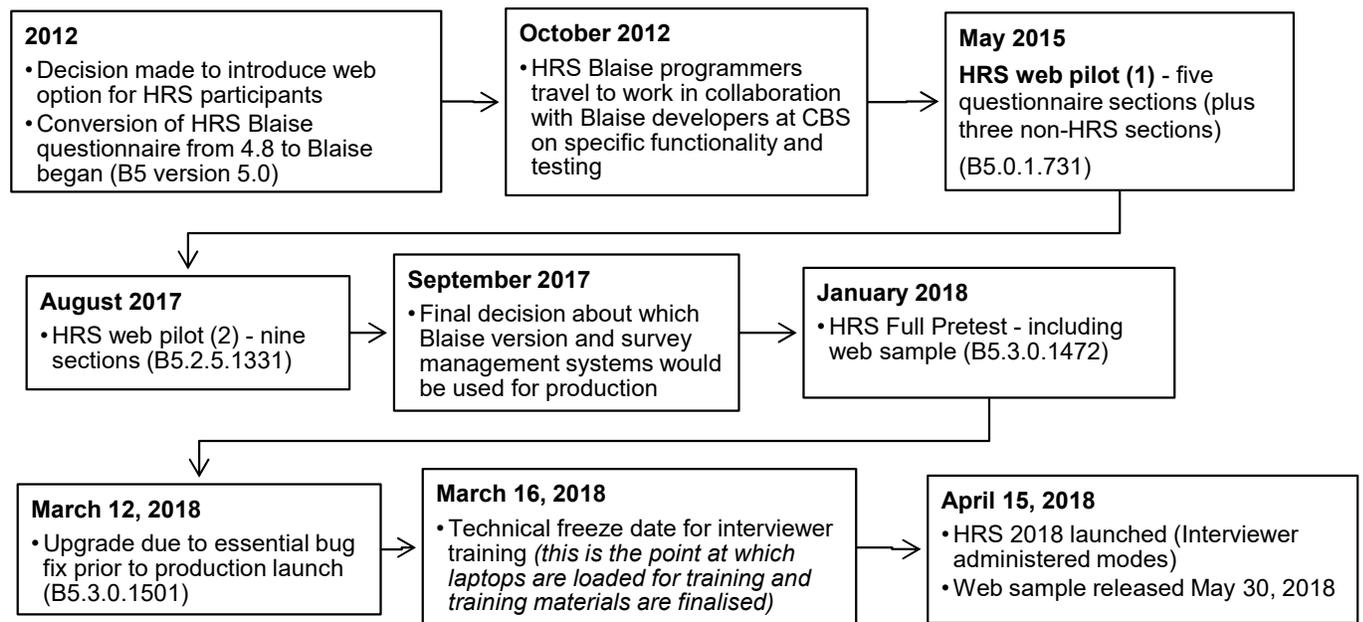
A summary of the development timeline and key decision points are included in Figure 1. The preproduction period for the 2018 wave of data collection extended much longer than is usual for a new wave of data collection and included more piloting and testing phases. The main pilots took place in May 2015 and August 2017 but there were numerous testing phases of systems and questionnaire changes.

The objectives of the initial pilot were to test the questionnaire sections that had been converted to web and Blaise 5 by this point in time, to gather feedback from respondents from a design and usability perspective and also on the acceptability of self-completion. In addition we needed to test the

functionality available in the survey management system. The pilot also provided a first chance to review data collected using Blaise 5.

The second pilot was a broader test of systems and survey rules. One of the main items was a structured test of the contact protocol we planned to use to invite participants to complete the survey and then follow up with non-responders. In addition, the pilot gave us a second opportunity to test the web interface, further functionality available in the survey management system and the conversion of HRS specific protocol to web mode. Again, the data was reviewed and analyzed to identify any potential mode effects across a variety of measures.

Figure 1. Development timeline



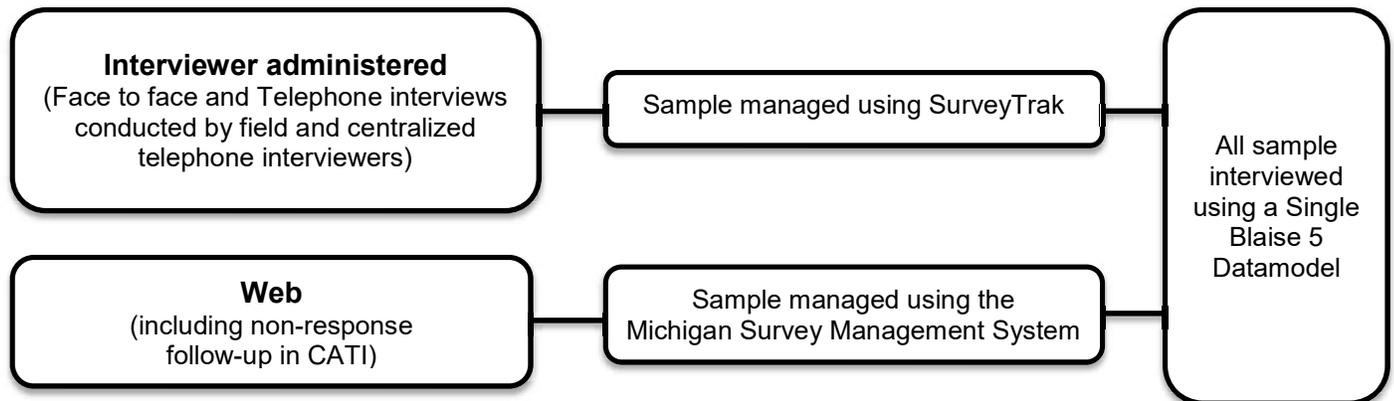
4. System design

In parallel to the work required to transition HRS to Blaise 5, the Survey Research Center was developing a multimode survey management system - the Michigan Survey Management System (MSMS). At the time development was focused on building functionality required to manage online and telephone data collection.

Moving the HRS to a new version of Blaise and a new management system concurrently was high risk. To control this risk, our initial decision was to move towards this goal, we agreed, however, to set predetermined points when we reviewed progress and agreed next steps.

Our final decision point was in September 2017. At this point we decided to move forward with Blaise 5 across all data collection modes and to manage the web sample (including telephone non-response follow-up) in MSMS. The sample assigned to interview administered modes would be managed using the existing sample management system used by HRS (SurveyTrak) which was adapted to use with Blaise 5.

Figure 2. Systems used for launch of production



5. Piloting and testing

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6. Scope of work involved in transitioning the HRS to Blaise 5 and mixed mode

The following is a summary of the tasks involved in transitioning the HRS to Blaise 5 and a mixed mode study.

- Convert the HRS questionnaire to Blaise 5.
- Adapt the questionnaire to mixed mode – including the development of a web instrument.
- Upgrade all current systems, that interact with Blaise, compatible with Blaise 5 - this includes systems designed to handle testing and test case management, questionnaire documentation, data processing and data quality control, interviewer quality control, systems involved in transmission of data to and from interviewers, process used to record interviews, the legacy survey management system .

- Develop screen design and layout templates for Blaise 5 – interviewer administered and web interface.

The series of papers in this session describe components of this transition process in more detail along with the technical design for systems and protocol. Throughout the process we maintained a close collaboration with the Blaise development team at Central Bureau of Statistics (CBS) to resolve technical issues – we greatly appreciate the team’s quick response to our many questions and willingness to work with us to resolve the issues we encountered.