

Experimental methods to increase online response rates in Australian Social Surveys

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Australian Bureau of Statistics

Informing Australia's important decisions



- Context

The Australian Labour Force & History

- Our Household Survey Innovation Panel

- *Panel design*
- *Recent results*
- *Surprising findings*

- Some reflections

Australian Labour Force Survey (LFS)

- 8 months, 8 rotation groups
- Address based sample
- 2 week reference period
- Proxy reporting for all individuals in household
- Mixed mode
 - First month = >50% CAPI, 20% eForm (at 2017)
 - Months 2-7 mostly CATI or eForm
- 92% response rate
 - Slowly falling
 - No incentives

	Australia	Canada	NZ	UK	US
Frequency	Monthly	Monthly	Quarterly	Quarterly	Monthly
Responding sample size	26,000 households	56,000 households	15,000 households	40,000 households	74,000 households
	50,000 people	100,000 people	30,000 people	100,000 people	105,000 people
Response rates	~ 92%	~ 90%	~ 86%	~ 49%	~ 86%
Rotation groups	8	6	8	5	8
Population compared to Aus		1.5 times the size	19% the size	2.7 times the size	13.3 times the size

Australian Labour Force Survey (LFS)

High costs

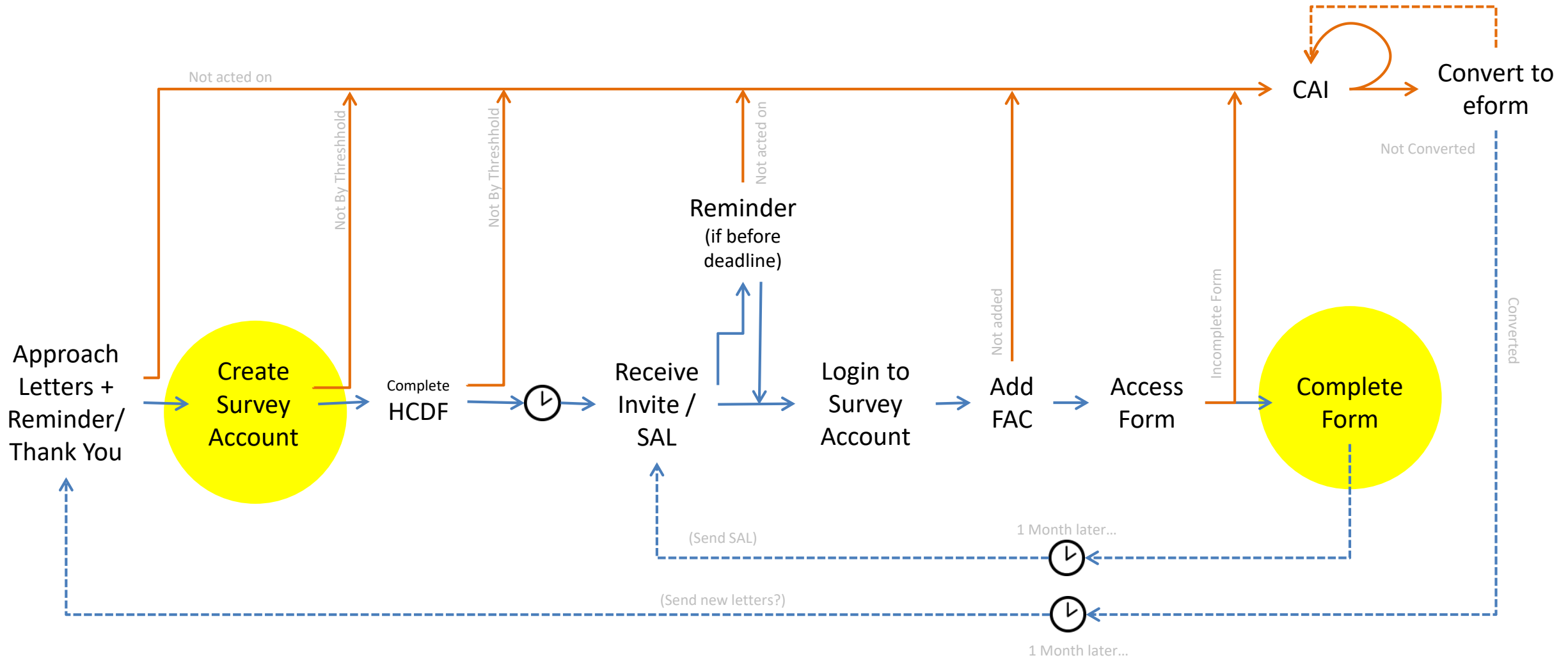
- LFS accounts for very large share of ABS collection costs.
 - ABS facing increasing budget pressures
- Eform mode introduced in 2012
 - Seen as the primary lever to reduce costs
 - Only 16% eform takeup (2017)

Low risk appetite

- Rich, Highly scrutinized & politically sensitive series
- Efficient sample design, sensitive to shocks
- Brittle systems & limited staff to maintain them

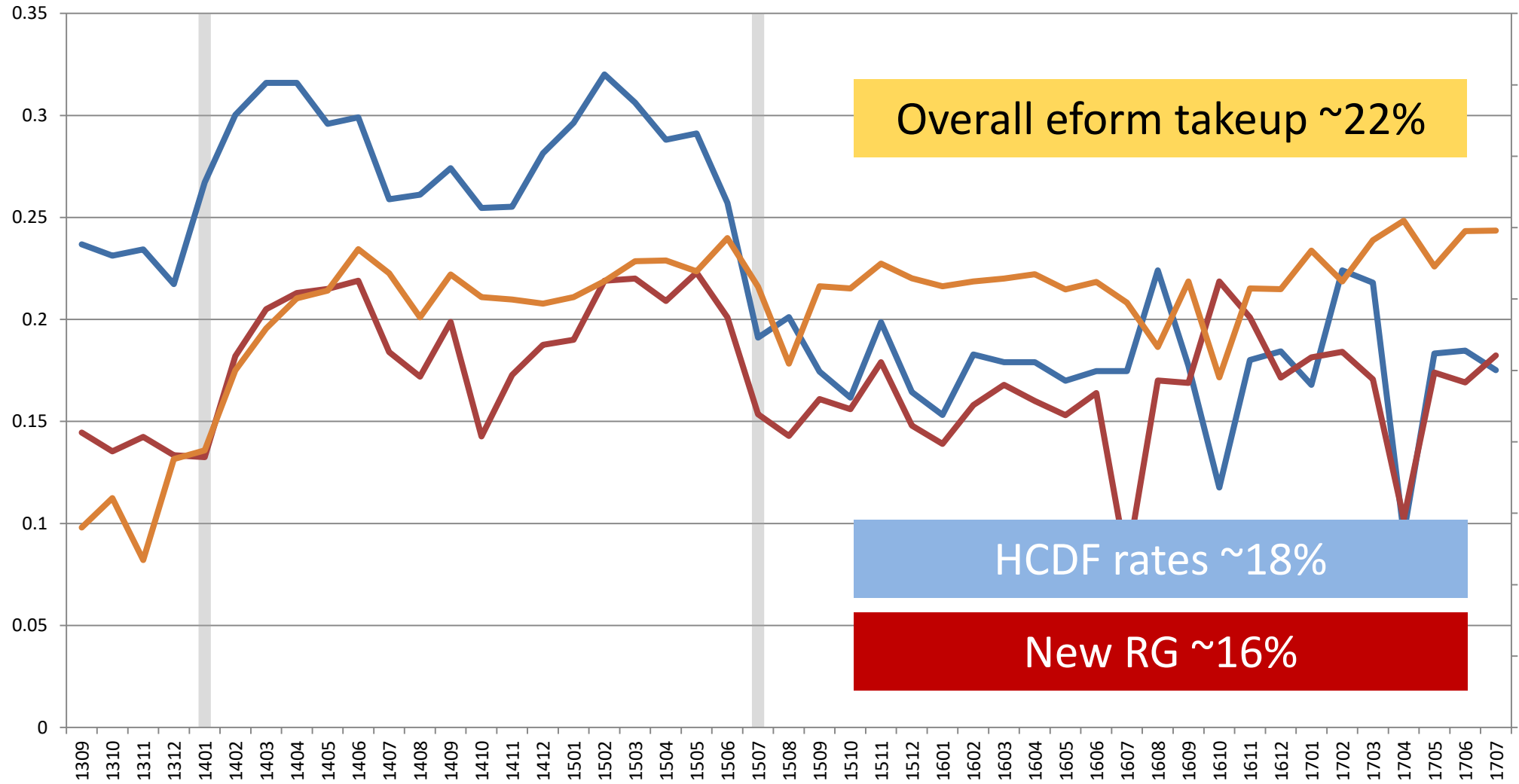
*Change is **necessary** ... yet **constrained***

MPS: Current state



LFS eform response rates

Event %HCDF (New RG) %eForm (NewRG, all areas) % of ALL FRHH completed by eform



A man in a hat and light-colored clothing stands in a field at sunset, holding a glass. A campfire is burning in the foreground.

How do we maximise
self-initiated response?

Responsive design
IPND to call respondents
Monthly attrition
HCDF timing
Letters
Optimised approach timing
Improve the form
HCDF extension
Clearer instructions
Interviewers as case managers
Priority post
Envelope design
Personalise letters with names
Email & SMS reminder content & timing
Rolling reference periods
How do we maximise self-initiated response?
Single use signon
Revised survey sales pitch
XIAM secret question removal
Magic
Market segmentation
Gradual engagement
Approach strategy
Better survey name

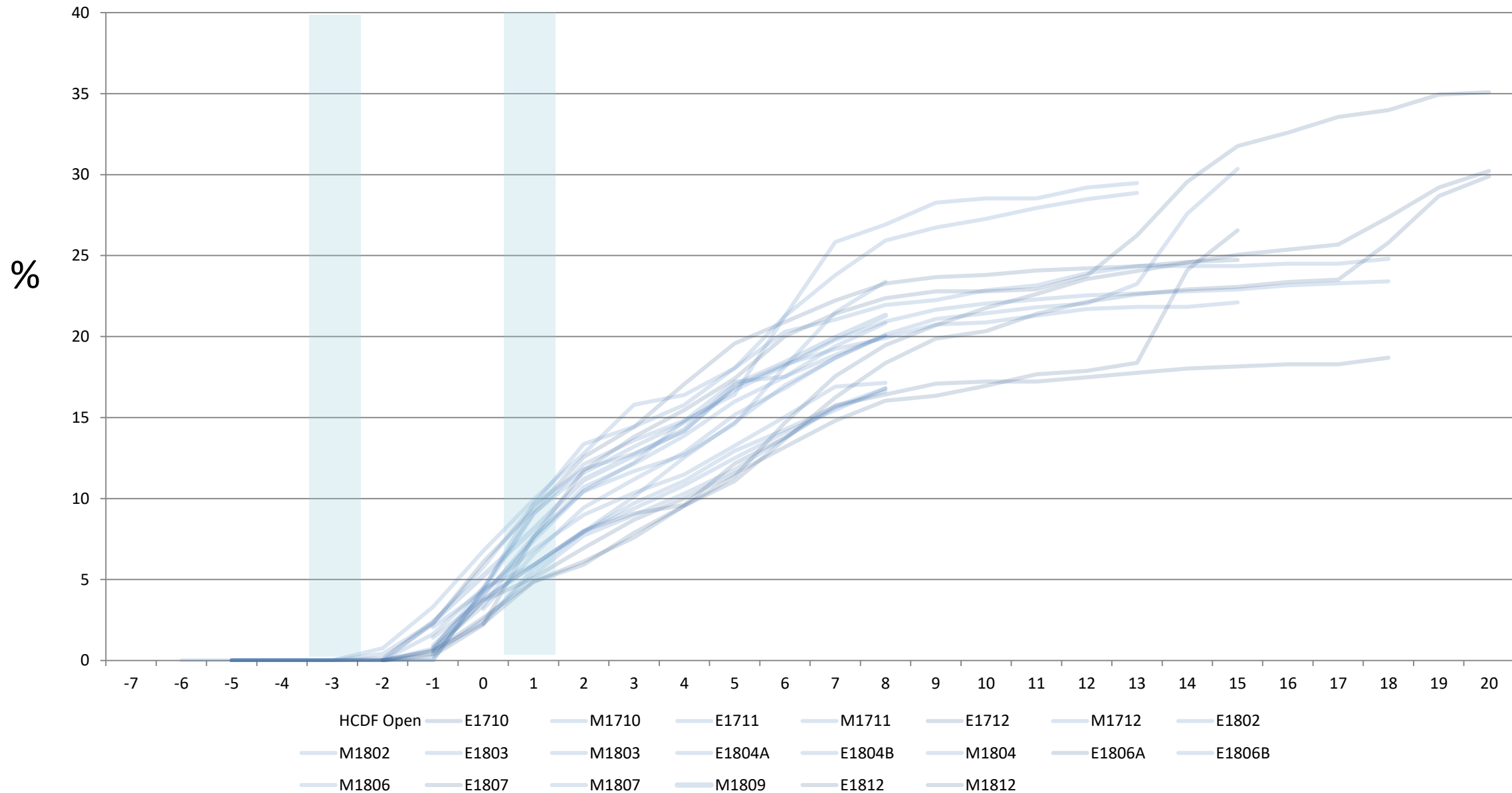
The proposal: An quasi-embedded experimental program

- Monthly Randomised Controlled Trials
 - Small number (**n=700 additional households**) selected, **monthly**, commencing October 2017
 - **Field procedures and materials mimic LFS** except for the *experimental treatment* that is hypothesised to increase the likelihood of self-initiated response.
 - **Response rates compared to those of mainstream LFS**, enabling ABS to identify the causal factors driving e-collection take-up.
- Minimised risk to Labour Force by **segregating the experimental sample and systems from mainstream MPS**
- **Qualitative followup** to contact nonrespondents & understand why they did not respond (i.e. barriers identification)
- Implementation risk minimised & managed through **demonstrated, experimental/scientific approach**





Cumulative HCDF completion rate (cumulative %)

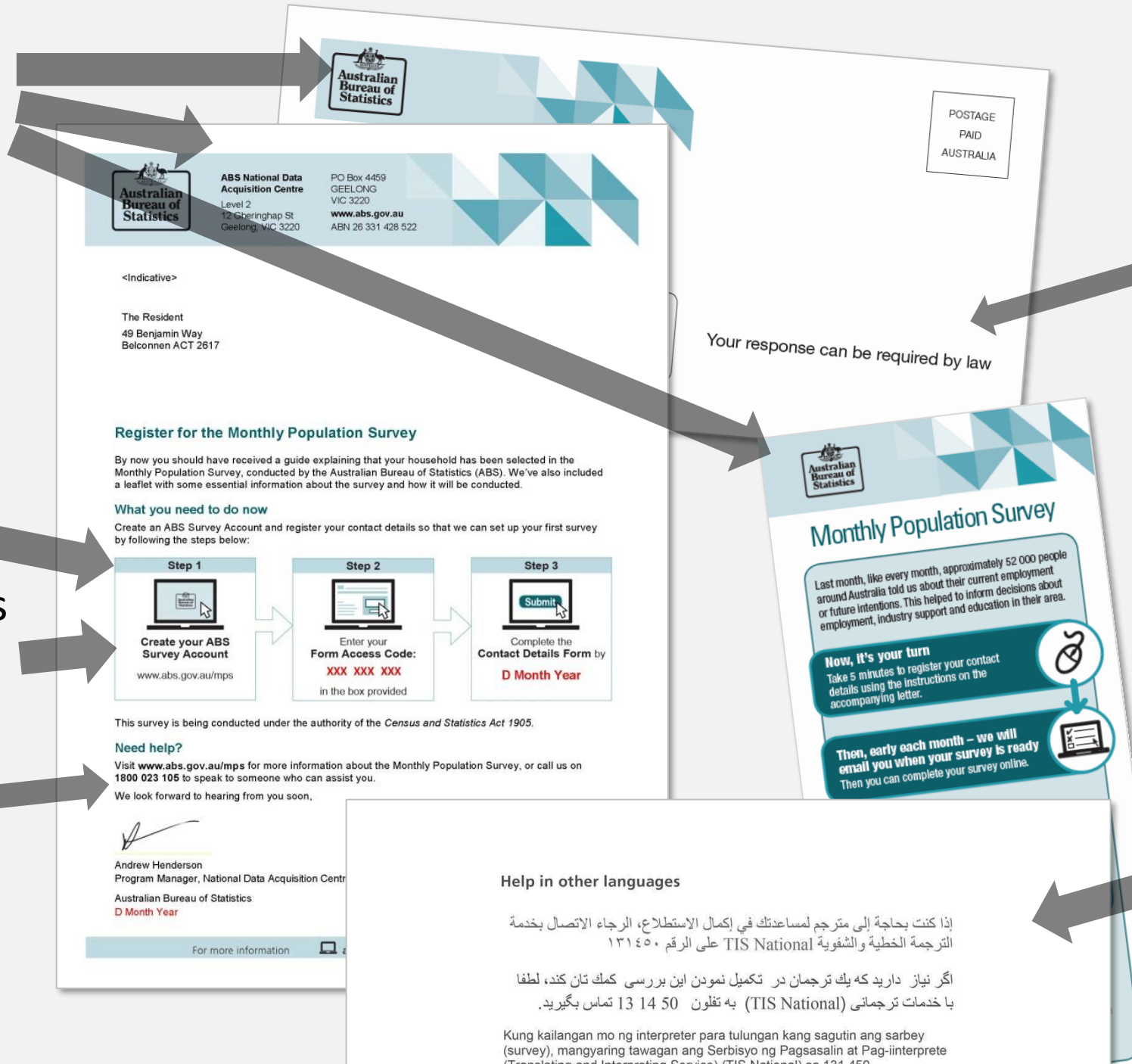


Common,
Consistent
branding

Reduced &
Clearer,
Prioritised
content

Graphical cues
+ Colour
emphasis

Dedicated
website for
extra
information



New envelope teaser

Translation
Information
Statement (TIS)

New

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<Indicative>




The Resident
49 Benjamin Way
Belconnen ACT 2617

Register for the Monthly Population Survey

By now you should have received a guide explaining that your household has been selected in the Monthly Population Survey, conducted by the Australian Bureau of Statistics (ABS). We've also included a leaflet with some essential information about the survey and how it will be conducted.

What you need to do now

Create an ABS Survey Account and register your contact details so that we can set up your first survey by following the steps below:


<p>Step 1</p>  <p>Create your ABS Survey Account www.abs.gov.au/mps</p>	<p>Step 2</p>  <p>Enter your Form Access Code: XXX XXX XXX in the box provided</p>	<p>Step 3</p>  <p>Complete the Contact Details Form by D Month Year</p>
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This survey is being conducted under the authority of the *Census and Statistics Act 1905*.

Need help?

Visit www.abs.gov.au/mps for more information about the Monthly Population Survey, or call us on **1800 023 105** to speak to someone who can assist you.

We look forward to hearing from you soon.



Andrew Henderson
Program Manager, National Data Acquisition Centre
Australian Bureau of Statistics
D Month Year

For more information abs.gov.au/mps 1800 023 105

Old

Register for the Monthly Population Survey

By now you should have received a guide explaining that your household has been selected in the Monthly Population Survey, being conducted by the Australian Bureau of Statistics (ABS). We've also included a leaflet with some essential information about the survey and how it will be conducted.

The questions included in this survey are being asked under the authority of the *Census and Statistics Act 1905*. Under the Act, you are obliged to provide the information being requested. The ABS is required by the Act to maintain the secrecy of all information provided to it. No information will be released in a way that would enable an individual or household to be identified.

What you need to do

Simply create an ABS Survey Account and register your contact details so that we can set up your first survey. To do this, please follow the instructions to the right.


Then each month, we will email you to let you know that your survey is ready to complete online.

If you are unable to do any of this, please call us on **1800 060 911** (free call, excluding mobile phones). Your contact details are needed by **DD Month YYYY**.

Please discuss this with others in your household so they are aware of the survey.

Thank you for helping with this important request.

Yours faithfully,



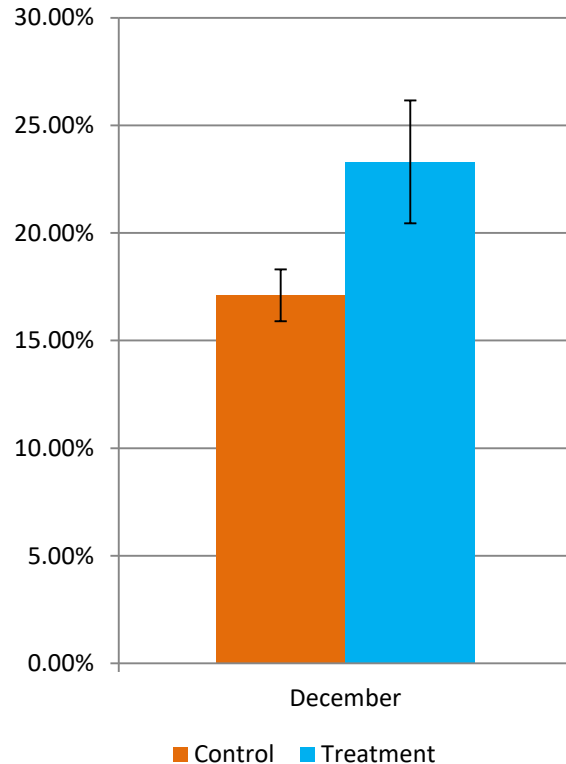
A. Henderson
Assistant Statistician, Data Collection and Acquisition Branch
Australian Bureau of Statistics
[date]

This survey uses the ABS Survey Account

Do you have a Survey Account?
If not, please create an Account at www.abs.gov.au/survey

To register your contact details:

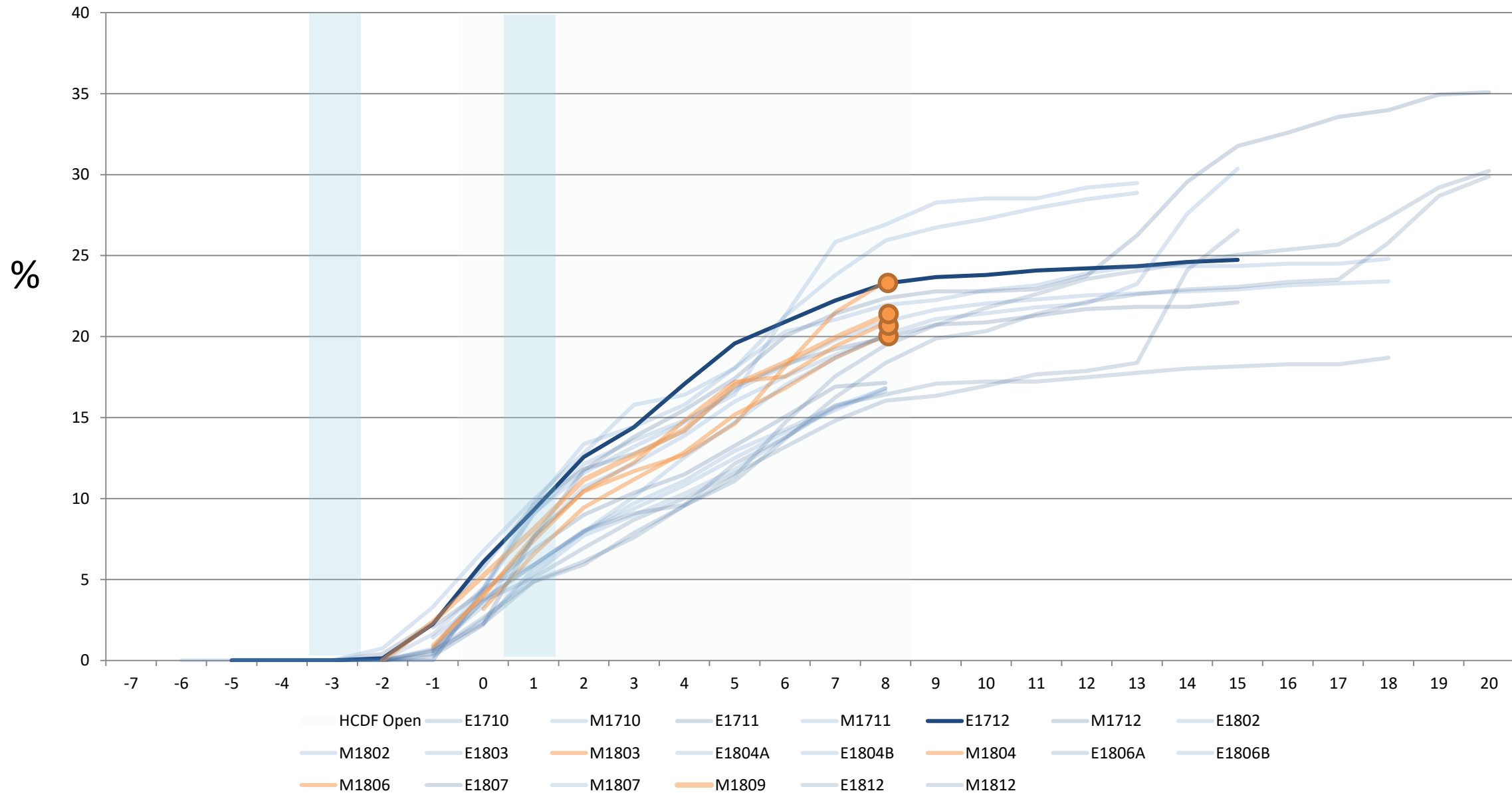
- 1 Log in to your ABS Survey Account at www.abs.gov.au/survey
- 2 Add the Monthly Population Survey to your Account by entering this **Form Access Code:**
XXXX-XXXX
- 3 Complete the **Contact Details** form by **DD Month YYYY**




Results:

- 6.2pp improvement from new materials
- Treatment (mostly) implemented in live LFS survey
 - Comparable results being achieved

Cumulative HCDF completion rate (cumulative %)



First reminder...



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«Indicative»

The Resident
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Reminder: Register for the Monthly Population Survey today

We recently sent you a letter explaining your household's involvement in the Monthly Population Survey (MPS) and how to set up your first survey.

If you have already registered, thank you for your timely cooperation. We will contact you when your first MPS survey is ready to be completed. Please ignore the rest of this letter.


How to register:

Step 1




Create your ABS Survey Account
www.abs.gov.au/mps

Step 2



Enter your Form Access Code:
XXX XXX XXX
in the box provided

Step 3




Complete the Contact Details Form by
5 April 2018



Can't register online? Call us on 1800 023 105

What if I don't register?
This survey is being conducted under the authority of *Census and Statistics Act 1905*. It is very important we speak to you. So if we don't hear from you an ABS interviewer will visit your address to conduct the survey.

Need help?
Visit www.abs.gov.au/mps for more information about the Monthly Population Survey, or call 1800 023 105 to speak to someone who can assist you.

Thank you for participating in this important national survey,


Andrew Henderson
Program Manager, National Data Acquisition Centre
Australian Bureau of Statistics
26 March 2018

For more information  abs.gov.au/mps  1800 023 105

...Second "overdue" reminder

Tone escalation

Serif font

...then...

Wall of text;
no images

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801A1/170K/030/A/REEP

The Resident
7 Ambara Pl
Aranda ACT 2614

We are trying to contact you.

You and your household have been selected in the Monthly Population Survey (MPS). We asked you to contact us before 7 June, but have not yet heard from you.

Australia's national labour force statistics are produced from this survey, including the employment and unemployment rates. Given the importance of these statistics, we conduct this survey under the authority of the *Census and Statistics Act 1905*. Your response can be required under this legislation.

These updated labour force statistics will be published in mid-July, which is why **your response is now urgent**.

Choose how you will respond - contact us now.

There are two ways to respond to the survey. Many people choose to respond online. However, if this is not convenient for you, or you do not contact us, an ABS interviewer will call or visit you to complete the survey.


Option A: complete the survey with an interviewer
Call us on 1800 023 105 today and we will arrange an interview at the earliest convenient time.

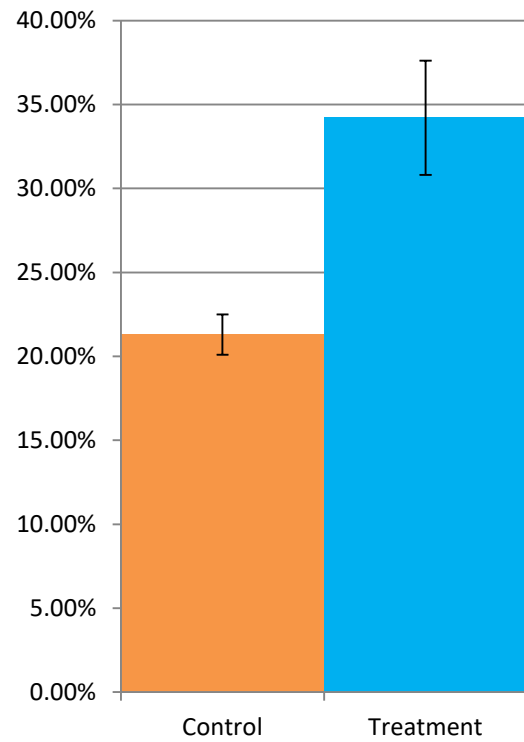
Option B: respond online
Create an account on our website and complete the survey online.

1. Go to www.abs.gov.au/mps
2. Click the blue 'Complete my survey' button, followed by the 'Continue' button.
3. Click the 'Create' button (on the right or at the bottom of the screen) to create your account.
4. Log into your new account, using the password you created in step 3.
5. On the right side of the screen, enter your Form Access Code: **yz57-vp64**
6. Complete your Household Contact Details Form and the Monthly Population Survey.

For more information about the survey, the questions we will ask, and how we protect your privacy, please visit our website: www.abs.gov.au/mps

Yours sincerely,

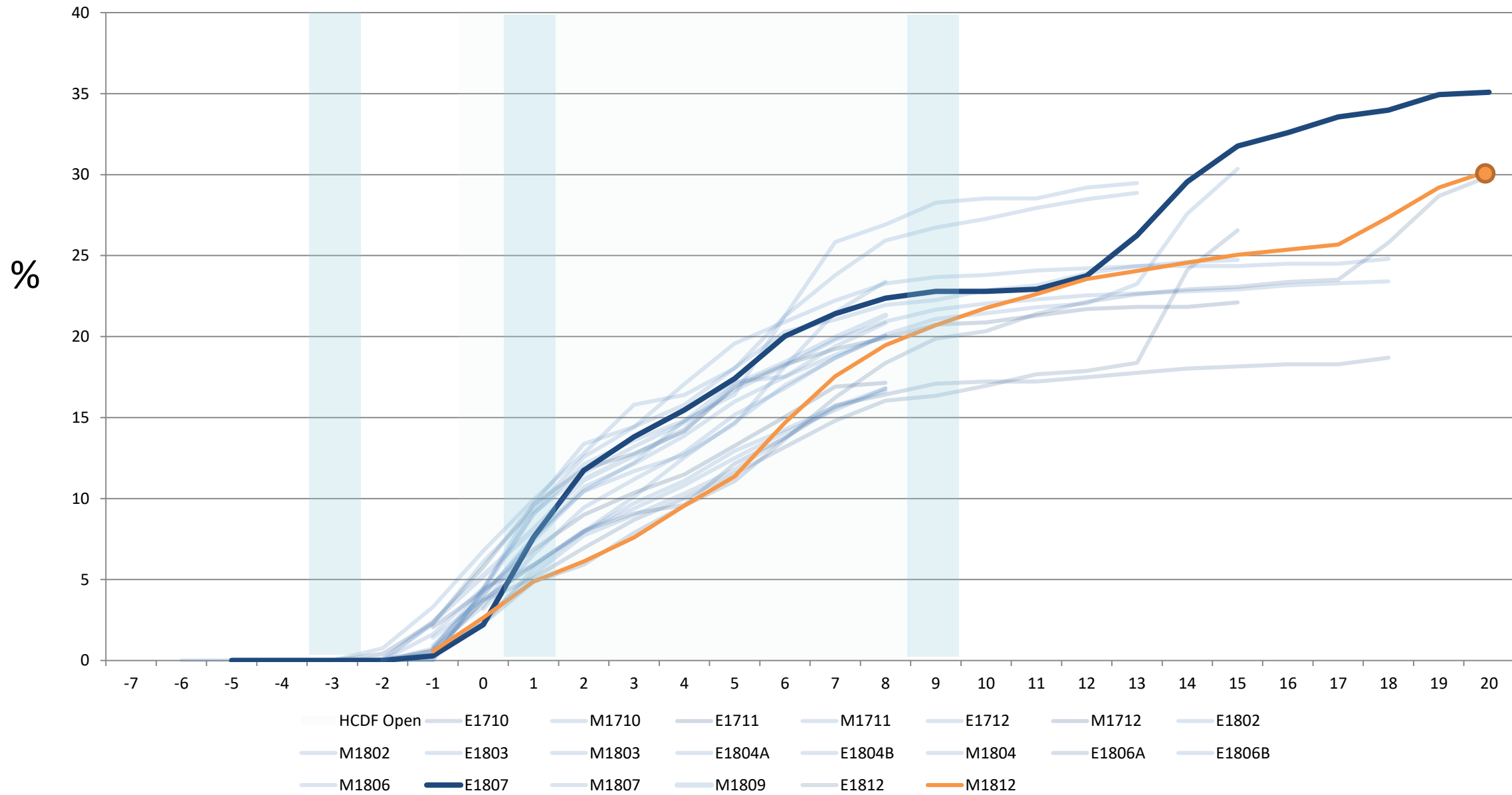

Andrew Henderson
Program Manager, National Data Acquisition Centre
Australian Bureau of Statistics
7 June 2018



Results:

- 13pp improvement from second reminder

Cumulative HCDF completion rate (cumulative %)



“Behaviourally inspired” approach strategy introduced



XIAM introduced



LFS eform response rates

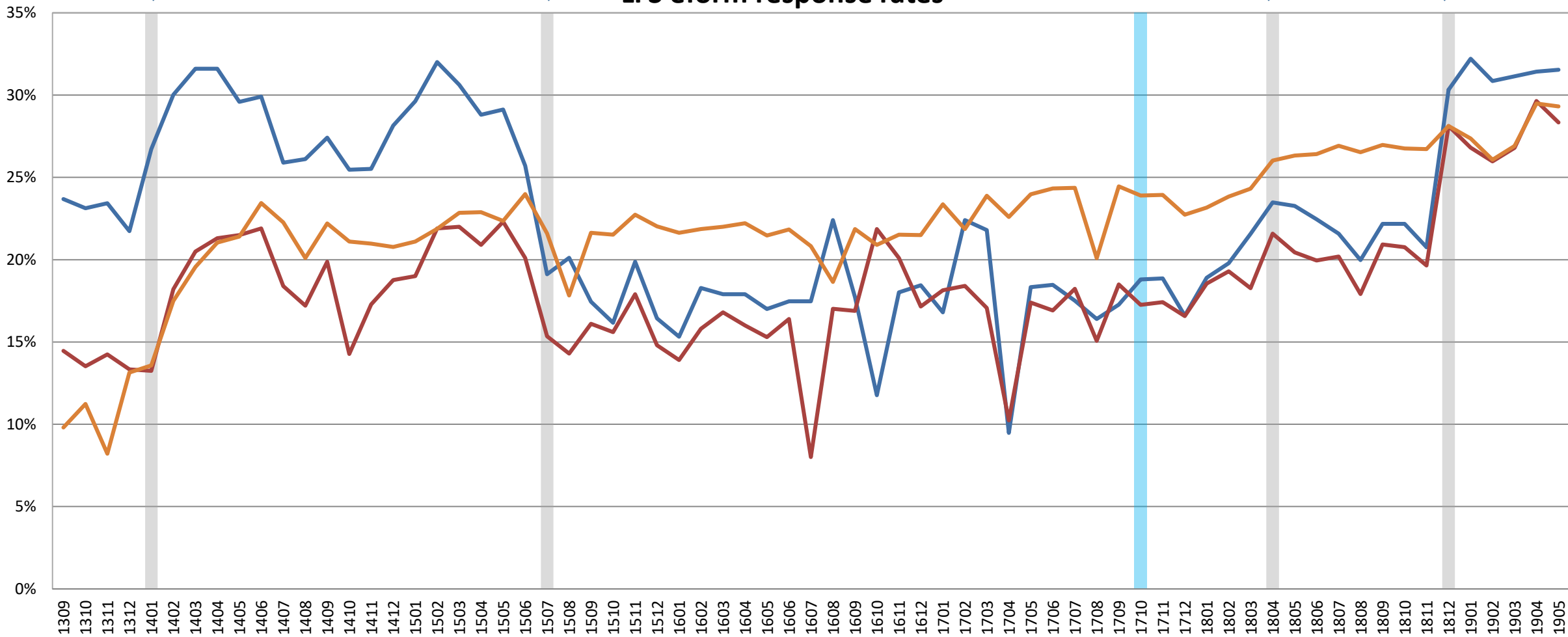
HSIP starts



HSIP Tranche1



HSIP Tranche2



Event

HCDF (New RG FRHH) %

%eForm (NewRG, all areas)

% of ALL FRHH completed by eform

Some highlights

What works...

- Visual improvements to letter (+6pp)
- Improved messaging and sales pitch (+5pp)
- Addition of 'bureaucratic' second reminder (+13pp) *examination of tone soon*
- Soft close (+2pp)
- Personalisation/Postit notes
 - Handwritten +8pp (*but...*)
 - Pre-printed +4pp
 - Image of postit n.s.

What hasn't...

- “Radically Simplified” approach letters (-10pp)
- Envelope teasers (n.s.)
- Compulsion messaging (n.s.)
- Extended deadlines with hard close (n.s)
- Plain “official” envelopes (-4.5pp vs coloured envelopes)



really help
us out!
Steve

Please
It'd really help
Steve

really help us —
really help us out!
Steve

Please contact us —
It'd really help
us out!
Steve

Current work

- Improved sales pitch for the survey & Social norms
- Tone of letter content & escalation over multiple contacts
- *Additional* email and SMS reminders
- Targeted strategies: Secure apartment buildings, remote populations
- Reducing the barriers reported by nonrespondents
- Improvements to website landing page & response process
- “Retaining” respondents over 8 months of LFS





“Why don’t you use a factorial design?”

...it’s much more efficient...

...and would tell you about the interactions”



Which design?

Factorial design

- Efficient use of sample
- Estimate interaction terms
- Quickly become large and complex
- High effort & management costs = single, one off experiment
- Vulnerable to implementation errors

RCT *program is...*

- highly responsive,
- maintains ecological and internal validity,
- is relatively robust to operationalisation errors,
- conducted at very low cost
- dramatically increasing adoption

Responsive

...highly responsive, maintains ecological and internal validity, is relatively robust to operationalisation errors, and yet is conducted at very low cost while dramatically increasing adoption

The monthly, low-effort design:

- Increases willingness to test more risky/unconventional approaches
- Is capable of informing immediate issues
 - Easily integrate new ideas from outside the organisation
 - Adapts to emerging and evolving interests, theory and problems
- Frequent results maintain interest in the experimental program *and* respondent behaviour generally

Internal & External Validity

...highly responsive, maintains ecological and internal validity, is relatively robust to operationalisation errors, and yet is conducted at very low cost while dramatically increasing adoption

- Internal validity of a well-designed RCT
- Externally valid and *Demonstrative*: uses existing systems and processes.
 - Evaluates the theory *and* it's implementation, together.
- Always up-to-date control condition:
 - ...minimises the theoretical leaps needed in implementation
- Qualitative followup

Robust to errors

...highly responsive, maintains ecological and internal validity, is **relatively robust to operationalisation errors**, and yet is conducted at very low cost while dramatically increasing adoption

When live systems go wrong:

- We run the trial again next month
 - And opportunistically benefit from “natural experiments” when errors do occur
-
- In the worst case, we have “spent” $n=700$
 - Errors in a factorial design would be more concerning.
 - Complex designs can *cause* errors.

Low cost

...highly responsive, maintains ecological and internal validity, is relatively robust to operationalisation errors, and yet is conducted at **very low cost** while dramatically increasing adoption

- Quasi-embedded:
 - 700 topup sample per month
 - powered to detect ~3.5-4pp differences
 - Control group “for free”
 - total n=4200 each month, for the cost of 700*3 letters. (< \$5k / month)

Adoption

...highly responsive, maintains ecological and internal validity, is relatively robust to operationalisation errors, and yet is conducted at very low cost while **dramatically increasing adoption**

- From a baseline of 16%...
- High ROI
 - 16pp+ improvement to date (*without incentives*)
 - A further 5-10pp further identified (*would achieve ~40% sample - without incentives*)
 - Despite our account system has not been resolved – do we have additional ‘latent’ electronic responders?
- Now scaling across ABS survey program
 - Adoption throughout our social survey program
 - Addressing unique needs
 - Looking to expand into a similar business survey program

Future directions

1. Future experiments planned
 - Addressing key barriers reported by nonrespondents
 - Where is Australia's web takeup 'ceiling'?
2. Combining/consolidate across 20+ RCTs?
 - "roll up" into a fractional factorial design; other network approaches?
3. Can this vehicle be used for content experiments, not just approach/eform takeup?
 - Consent questions
4. Elaborate the model across the ABS survey program
 - Noting some key differences for business surveys

Questions?

stephen.cohen@abs.gov.au

- Context

The Australian Labour Force Survey

- Our Household Survey Innovation Panel

- Panel design
- Recent results
- Surprising findings

- Some reflections