Using cost modelling in the 2021 England and Wales Census to inform design decisions

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Meeting of the Group of Experts on Population and Housing Censuses

28 - 30 September 2016

Overview

- Importance/purpose of cost modelling
- 2021 Census overview
- Areas of cost modelling
  - Field staff allocation
  - Self-response
  - Paper capture
  - Coding
- Next steps

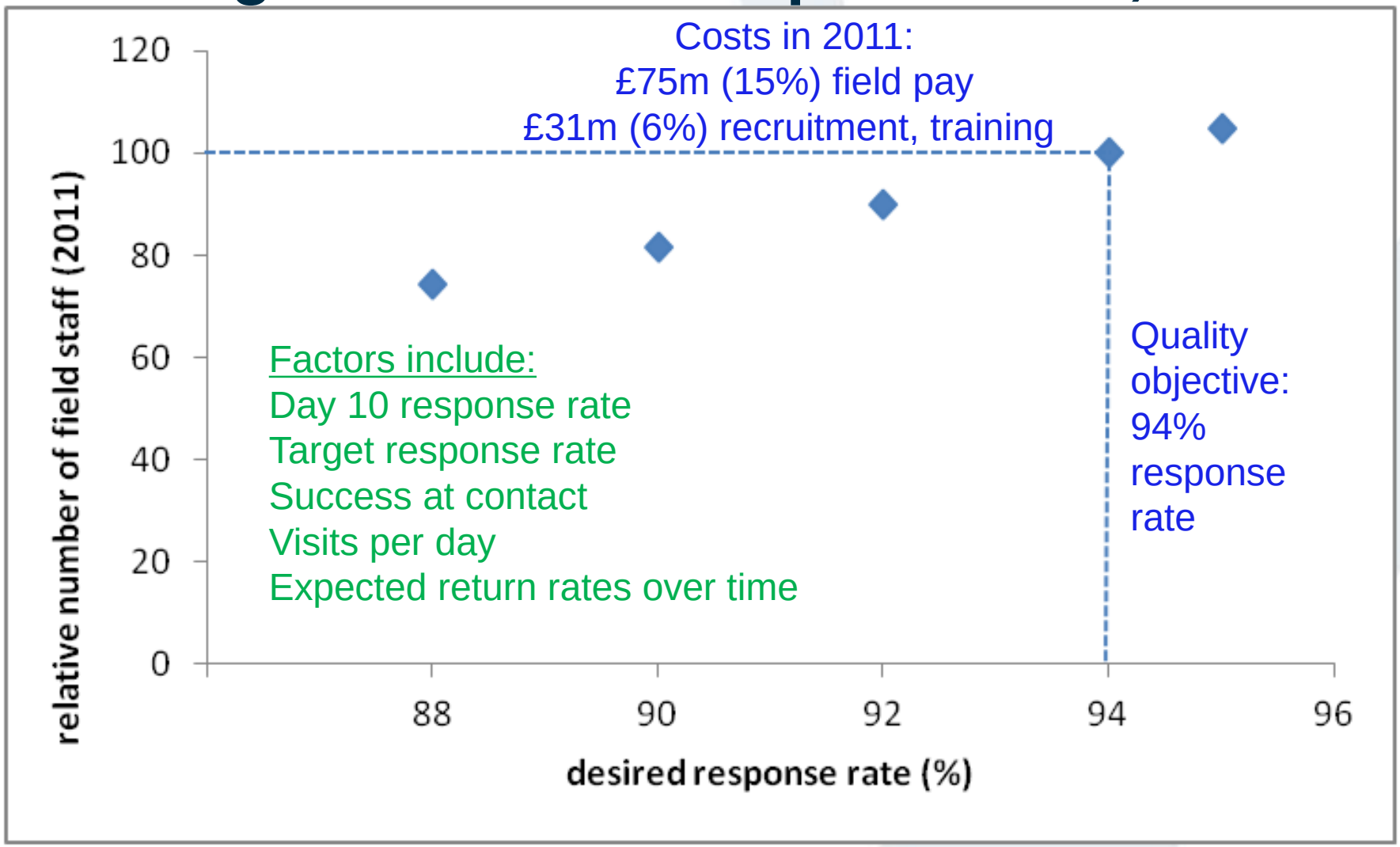
Importance/purpose of cost modelling

- Better information for scrutiny of business case
- Informing the design
- Understand impacts if assumptions made are not met in operation
- Informing decisions to out-source services
- Feeding into cross-cutting transformation services

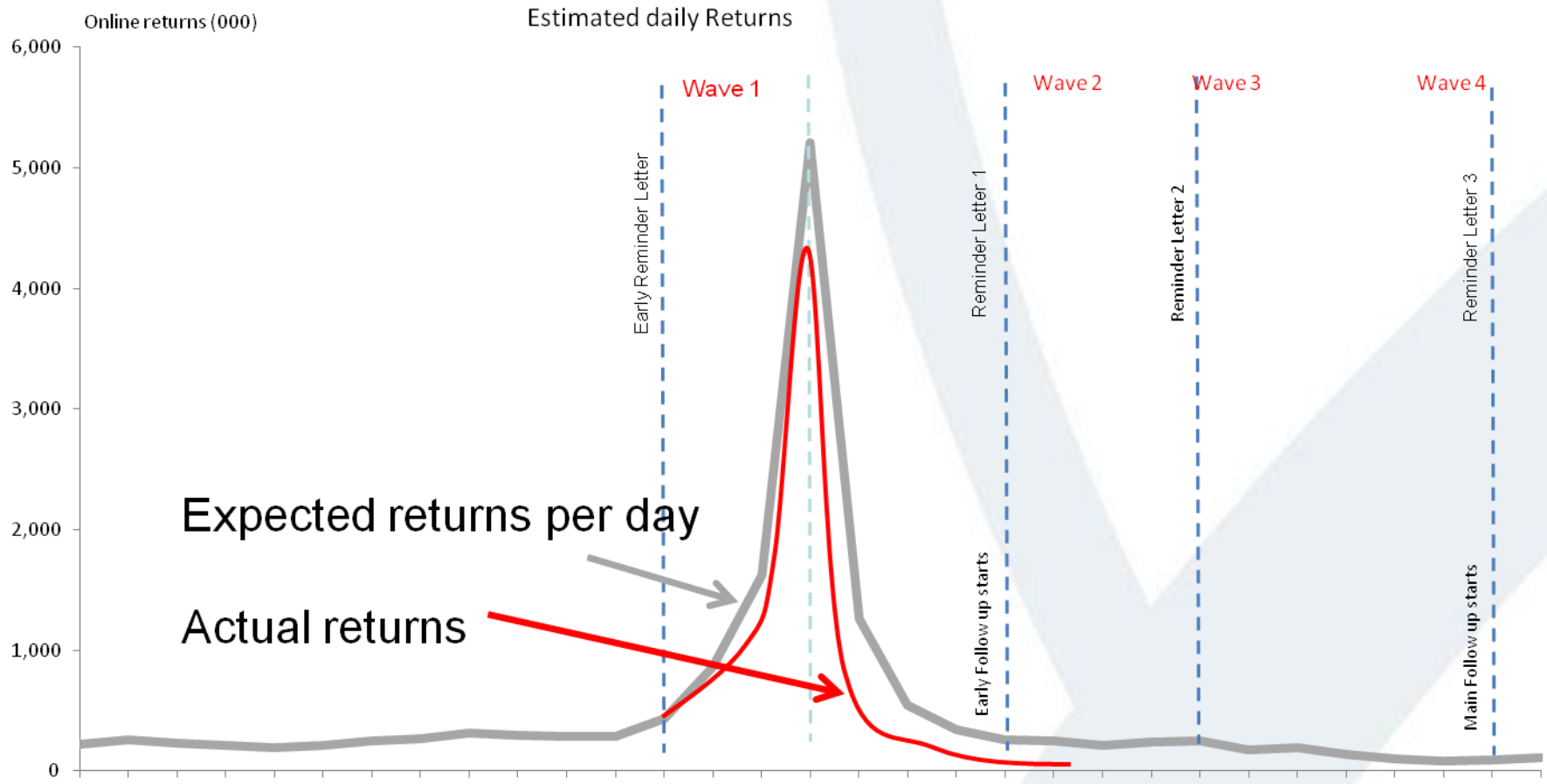
2021 Census – main areas of change

- Online questionnaire
- Digital inclusion
- Follow-up
- Operational management
- Data processing
- Census outputs

Relative number of field staff needed for a given desired response rate, 2011



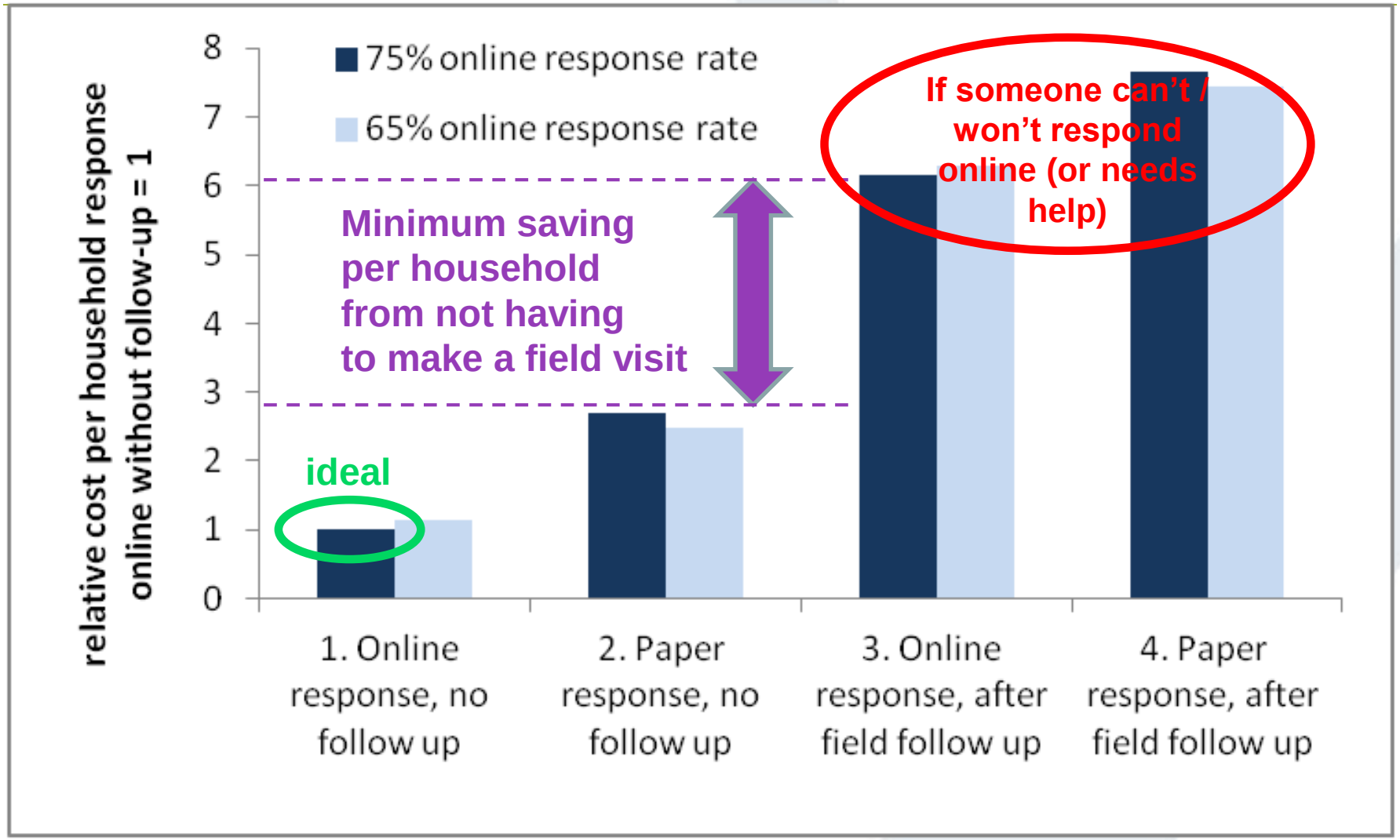
Expected versus live return profile – understand impact of interventions



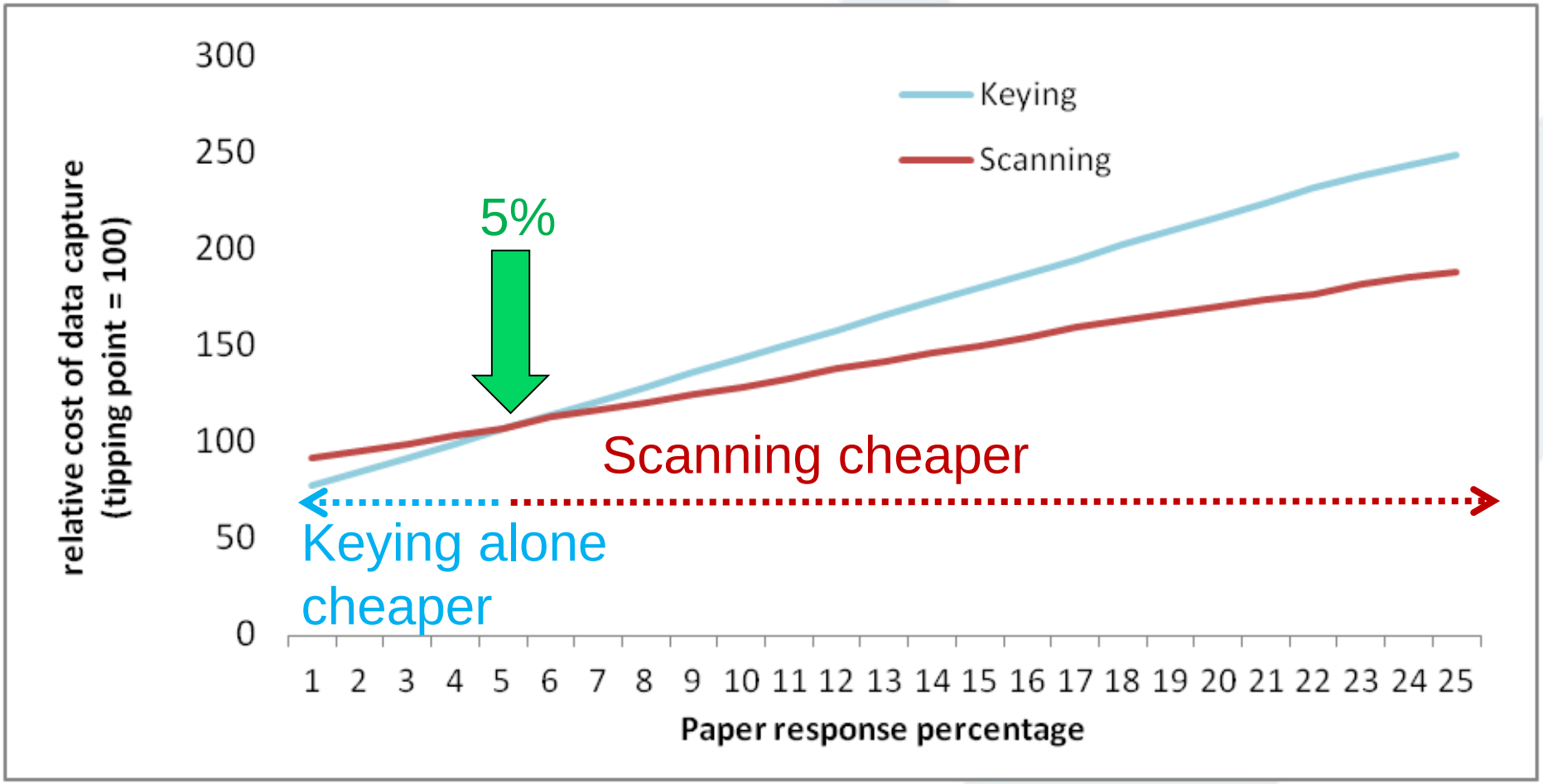
Three examples going forward for 2021

- Cost per household with and without field follow-up, online and paper
- Tipping point for data entry method
- Coding savings

The need to provide some paper first



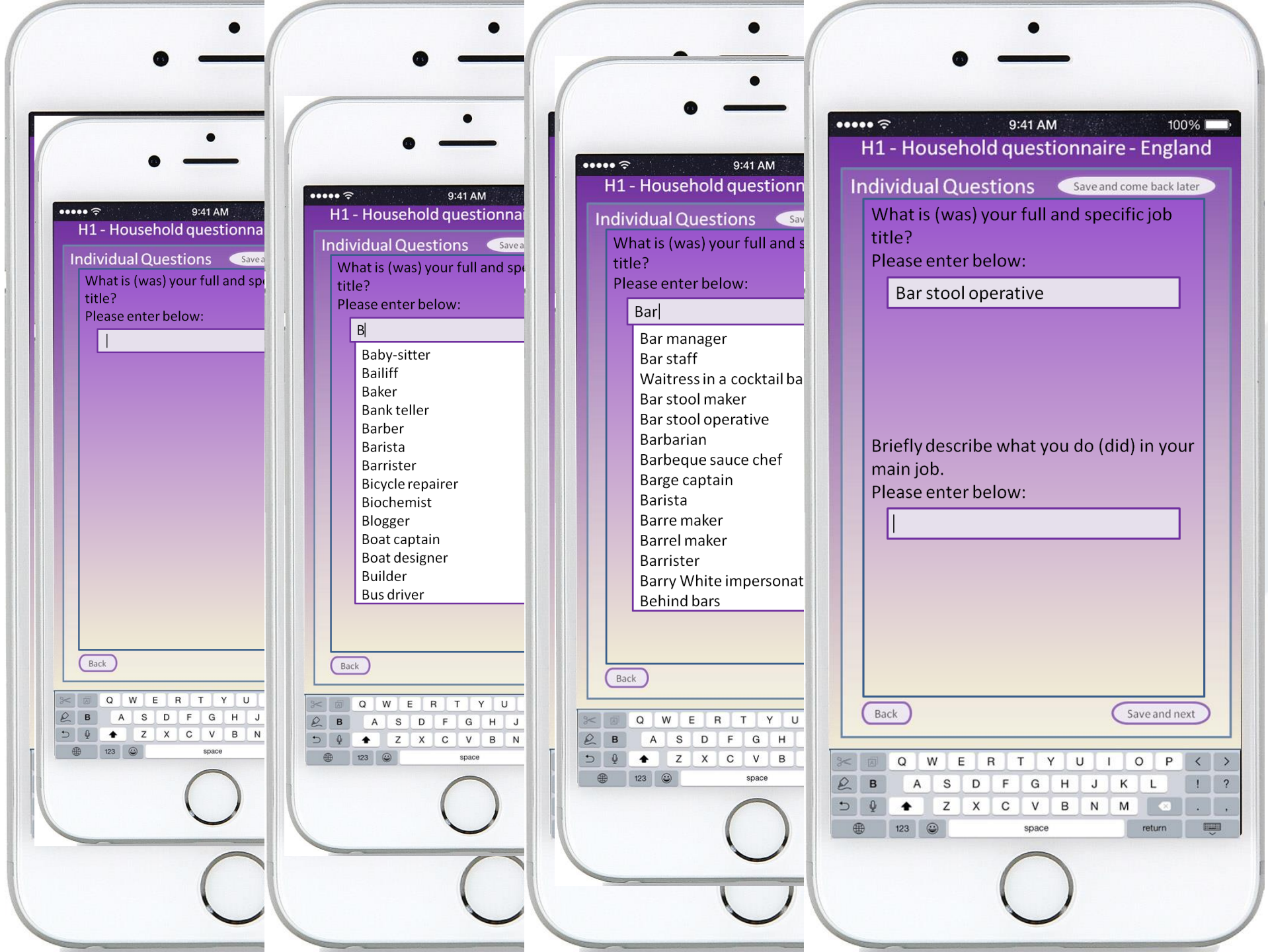
Paper capture – tipping point where scanning becomes more cost effective



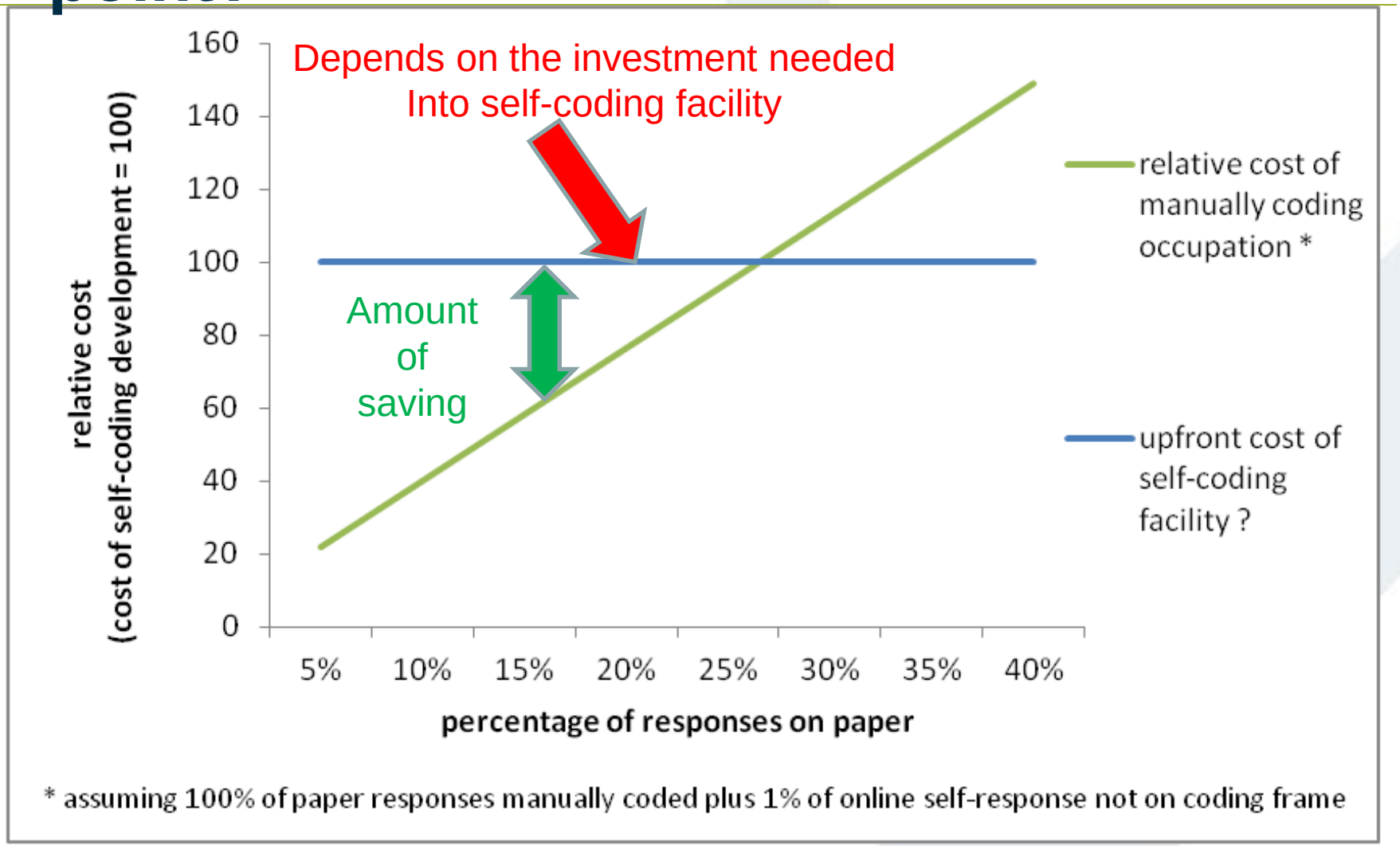
Coding

- Online questionnaire – opportunity to improve quality and reduce cost
  - self-coding by respondent
  - clarification questions only where necessary

- But with some development could reduce costs even further?
  - only online coding?
  - only a validation sample of paper responses?


9:41 AM
H1 - Household questionna
Individual Questions
What is (was) your full and sp
title?
Please enter below:
Back
9:41 AM
H1 - Household questionnai
Individual Questions
What is (was) your full and spe
title?
Please enter below:
B
Baby-sitter
Bailiff
Baker
Bank teller
Barber
Barista
Barrister
Bicycle repairer
Biochemist
Blogger
Boat captain
Boat designer
Builder
Bus driver
Back
9:41 AM
H1 - Household questionn
Individual Questions
What is (was) your full and s
title?
Please enter below:
Bar
Bar manager
Bar staff
Waitress in a cocktail ba
Bar stool maker
Bar stool operative
Barbarian
Barbeque sauce chef
Barge captain
Barista
Barre maker
Barrel maker
Barrister
Barry White impersonat
Behind bars
Back
9:41 AM
100%
H1 - Household questionnaire - England
Individual Questions
Save and come back later
What is (was) your full and specific job title?
Please enter below:
Bar stool operative
Briefly describe what you do (did) in your main job.
Please enter below:
Back
Save and next
space
return

Self-coding occupation – tipping point?



* assuming 100% of paper responses manually coded plus 1% of online self-response not on coding frame

What happens next

Continue to monitor and review assumptions

Update assumptions as testing confirms design

Volumetrics

Office for National Statistics

2021 Census

Thank you.

Comments, questions?