

Monitoring and addressing non-response surveys bias during the pandemic

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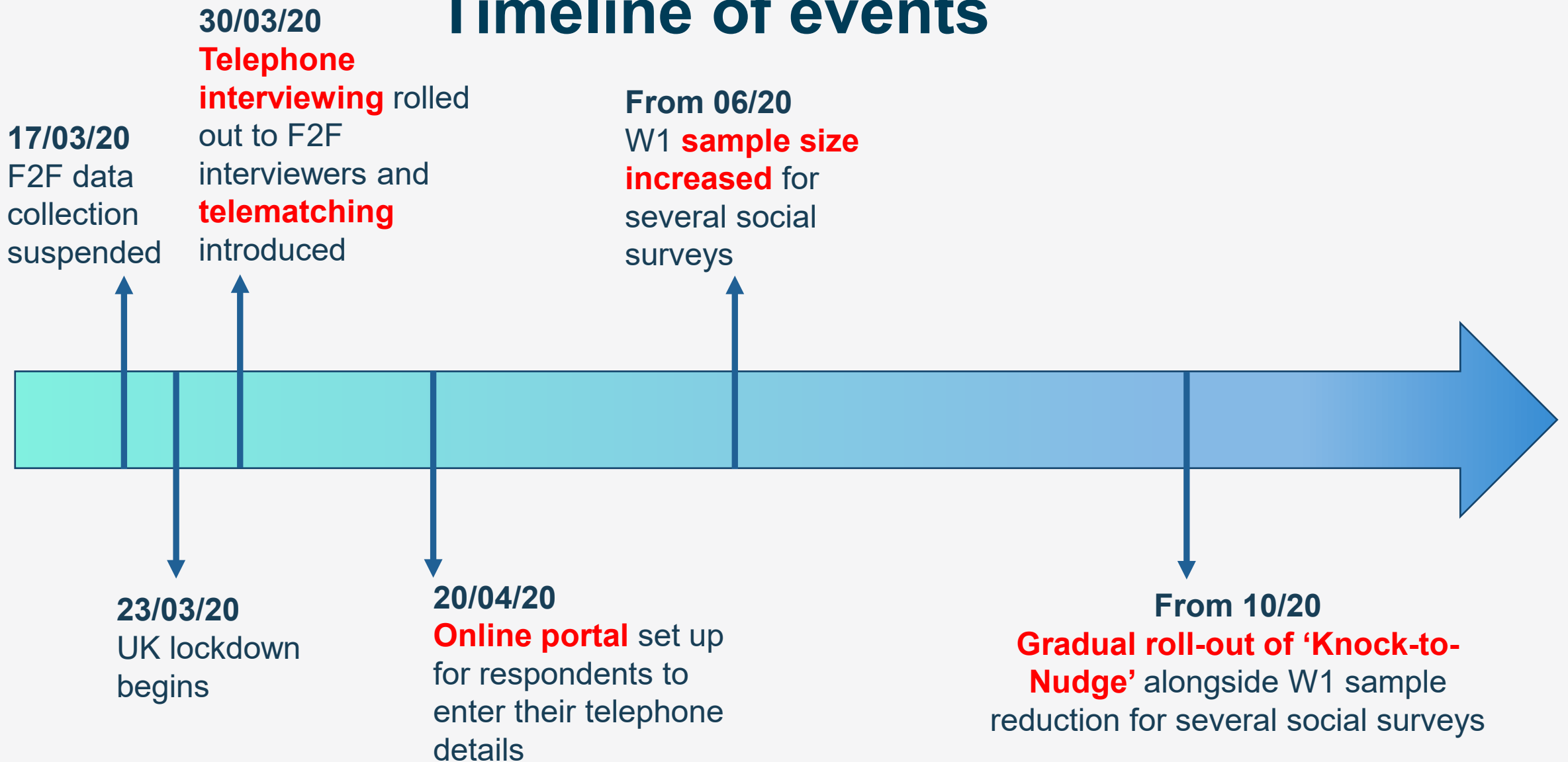
**UNECE Expert Meeting on Statistical Data Collection
27-30 September 2021**



Outline

- Timeline of events
- Knock-to-nudge
- Response biases, impact of Knock-to-nudge
- Response rates, impact of Knock-to-nudge
- Distribution of types of contacts – SLC example
- Information collected to inform field strategy – SLC findings
- Case Study: Labour Force Survey

Timeline of events



What is 'Knock to Nudge (KtN)'?

- **Nudging** essentially involves a field interviewer knocking at a respondent's door to remind them to provide their phone number, via the online portal or the ONS survey enquiry line, or directly to the interviewer.
- There is also the opportunity to schedule a telephony appointment at the doorstep.
- Maximum of **three calls to each household** (morning, afternoon, evening). It is recommended that two of these nudges are done on the same day.
- A **KTN call today card** is posted through the door for non-contacts on first visit.

Respondent characteristics response bias

Respondent Characteristics	SLC		LCF		LFS	
	Telephone	KtN Only	Telephone	KtN Only	Telephone	KtN Only
Age	Bias to 46+	Reduced bias	Bias to 46+	Reduced bias	Bias to 46+	Reduced bias
Ethnicity	No bias	Captured more BAME+	No bias	Captured more BAME+	No bias	No bias
Marital status	Bias to married/civil partnership	Reduced bias	Slight bias to married/civil partnership	Captured more single people	Bias to married/civil partnership	Reduced bias
Employment	Slight biased to economically inactive	Reduced bias	No bias	No bias	Slight bias to employed	Reduced bias

Household characteristics response bias

	SLC		LCF		LFS	
Respondent Characteristics	Telephone (biases compared to pre-pandemic)	KtN Only (biases compared to telephone)	Telephone	KtN Only	Telephone	KtN Only
Tenure	Bias to owners	Reduced bias	Bias to owners	Reduced bias	Bias to owners	Reduced bias
Household size	Bias to 2 persons hh	Reduced bias	Negligible bias	Reduced bias (negligible)	N/A	N/A
Rural/Urban	No bias	No bias	No bias	No bias	Slightly more rural	Reduced bias
OAC	Bias (less hard pressed living)	Reduced bias	Slight bias	Captured more "hard pressed living"	N/A	N/A
IMD	Bias to least deprived	Reduced bias(noticeable)	Bias to least deprived	Reduced bias	Negligible bias	Negligible bias

Response Rates

Survey	LCF			SLC (Wave 1)			LFS (Wave 1)			FRS*			NSW		
Dataset	Monthly	Highest	Lowest	Monthly	Highest	Lowest	Monthly	Highest	Lowest	Monthly	Highest	Lowest	Monthly	Highest	Lowest
	Average	Month	Month	Average	Month	Month	Average	Month	Month	Average	Month	Month	Average	Month	Month
Pre-Pandemic (2019/20 – exc. Mar'20)	43%	44%	40%	43%	46%	39%	55%	57%	51%	47%	49%	44%	59%	62%	54%
Telephone mode (Apr'20-May'21)	30%	36%	22%	27%	30%	22%	29%	33%	26%	26%	30%	22%	52%	75%	38%
KtN Period	31%	35%	29%	33%	40%	30%	39%	41%	40%	32%	36%	26%	42%	46%	38%

* Average taken from monthly rates

Types of contact for SLC W1: Jan- June 2021

	January		Feb		Mar		April		May		June	
Option	N	% of total sample	N	% of total sample	N	% of total sample	N	% of total sample	N	% of total sample	N	% of total sample
KtN	437	48%	543	56%	628	58%	631	58%	851	71%	740	67%
Portal cases (part of non-ktn)	144	16%	185	19%	218	20%	210	19%	160	13%	132	12%
Other non-ktn	177	19%	111	11%	126	12%	131	12%	104	9%	123	11%
Telematched*	152	17%	135	14%	112	10%	121	11%	81	7%	104	9%
Response Rates	394	30%	395	29%	450	33%	403	29%	418	30%	453	33%

* Some telematched cases include cases which were later classified as KtN –therefore the figures for Telematched are an overestimate

Information collected to inform field strategy

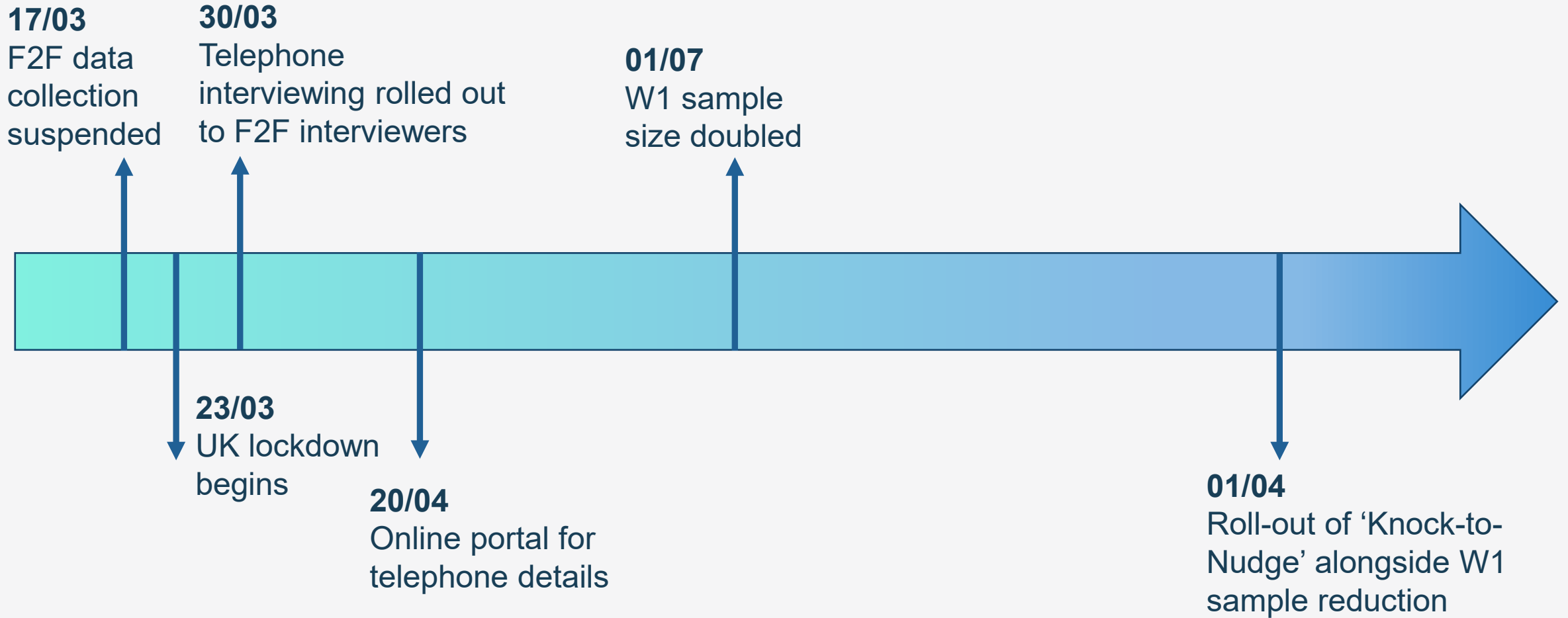
- KtN information collected in Blaise from December 2020
- 4 additional variables collected from March 2021:
 - **Day of visit:** Monday – Saturday
 - **Outcome of visit:** doorstep interaction, KtN called today card, appointment card
 - **Time of day of visit:** morning, afternoon or evening
 - **Number of visits :** 1, 2 or 3

Some of the SLC W1 March-June 2021 findings

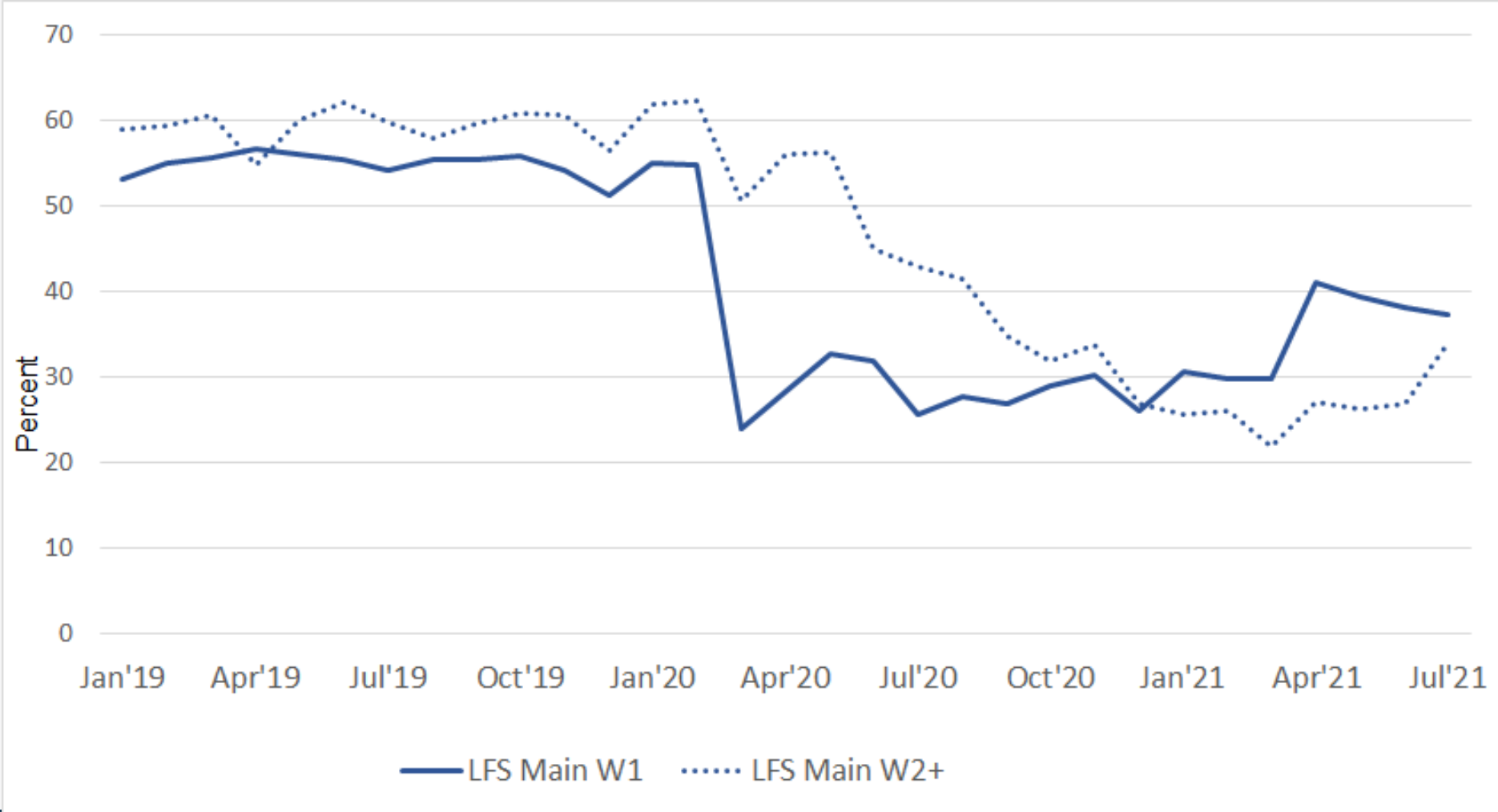
- Most households are visited **once** only.
- **Doorstep interactions** are crucial in achieving interviews.
- The likelihood of doorstep interaction and interview as an outcome reduced significantly with the number of visits. **Non-contact was high for households visited 2 or 3 times** .
- KtN Called Cards have a **marginal impact on getting interviews**.
- Most visits are made between Mondays and Thursdays . Preliminary results that **visits made earlier in the week (Mondays-Thursdays) are more effective at obtaining doorstep interaction**, whether they are first or second visits.
- **A large majority of visits were made in the morning and in the afternoon**, yet preliminary results suggest that there a **slightly higher likelihood of doorstep interaction in the evening** for both first and second visits.

Case Study: UK Labour Force Survey

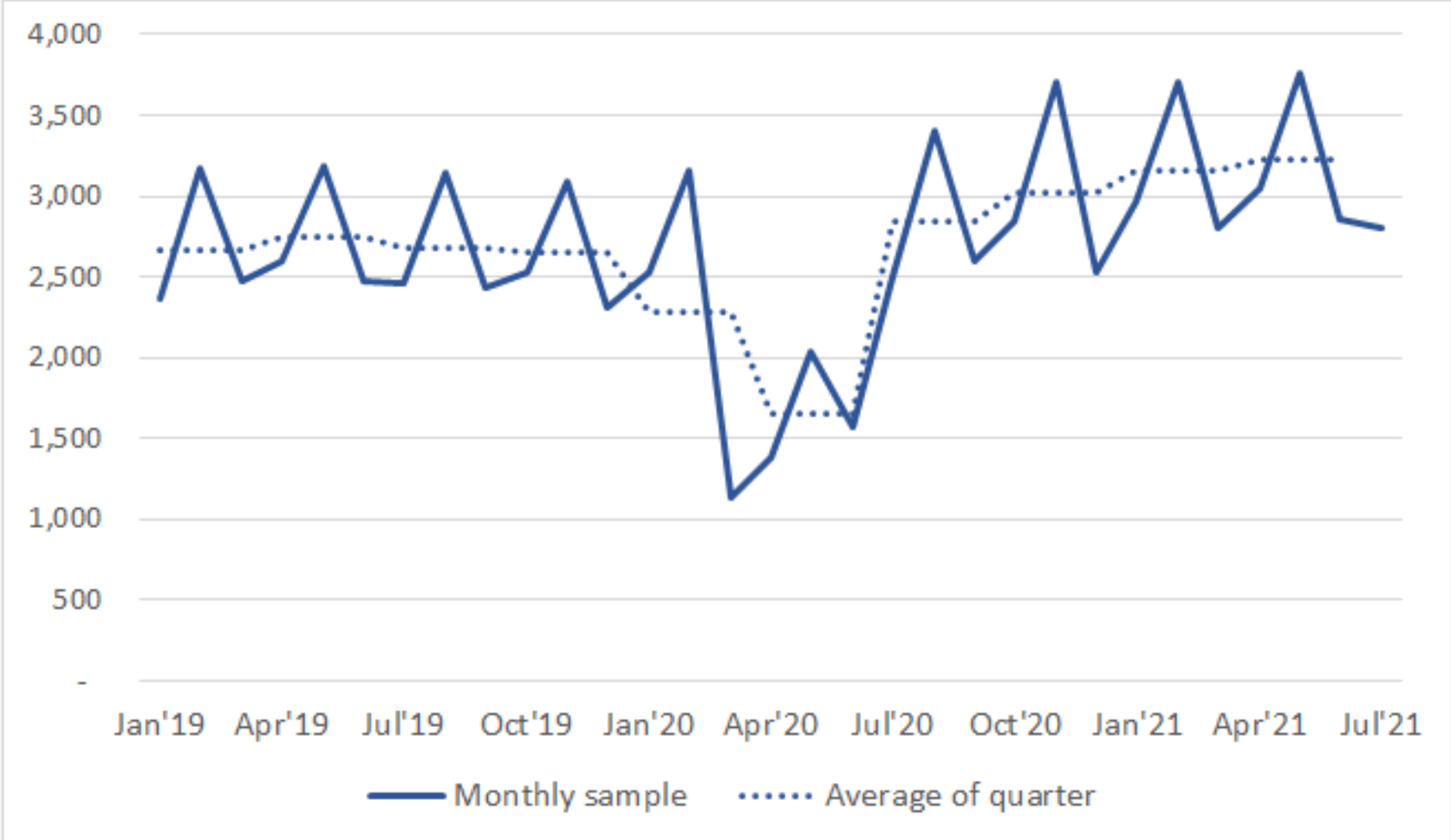
Timeline of events



LFS response rates 2019-2021



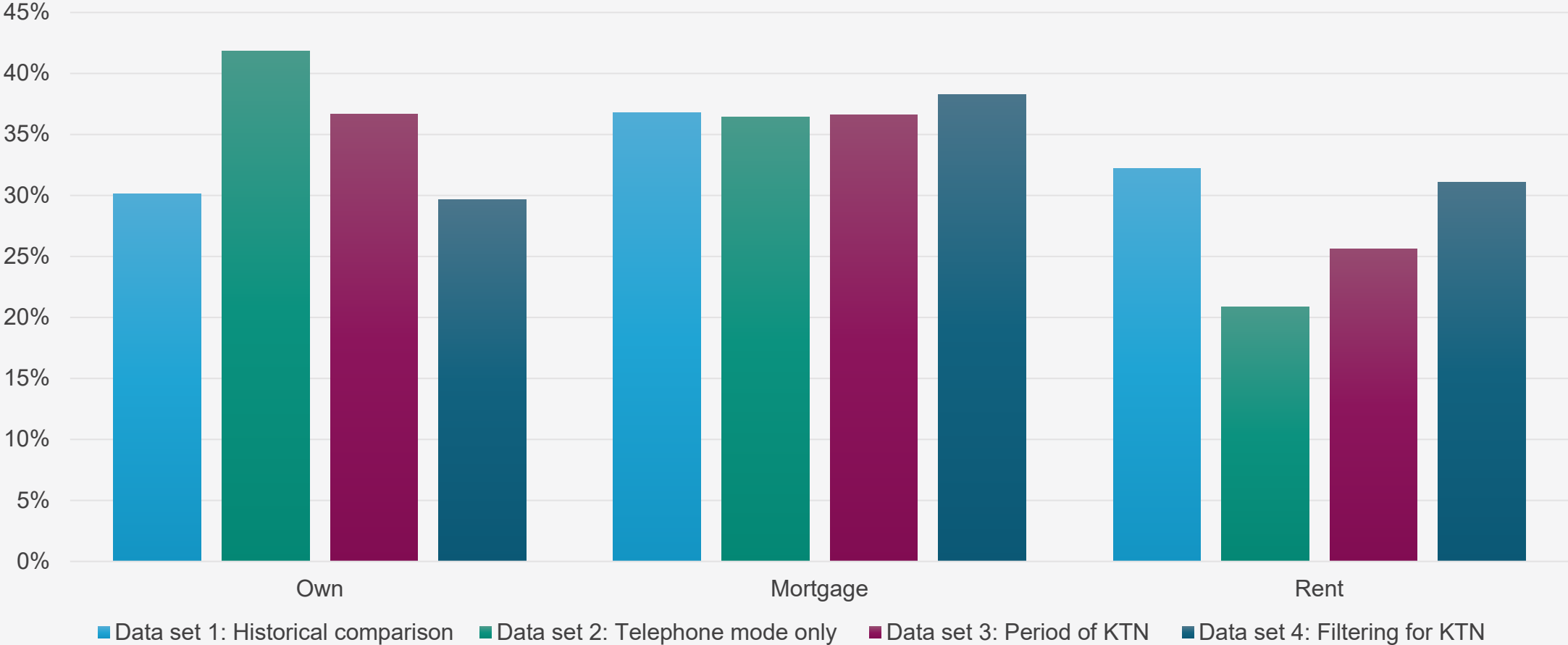
LFS achieved sample size 2019-2021



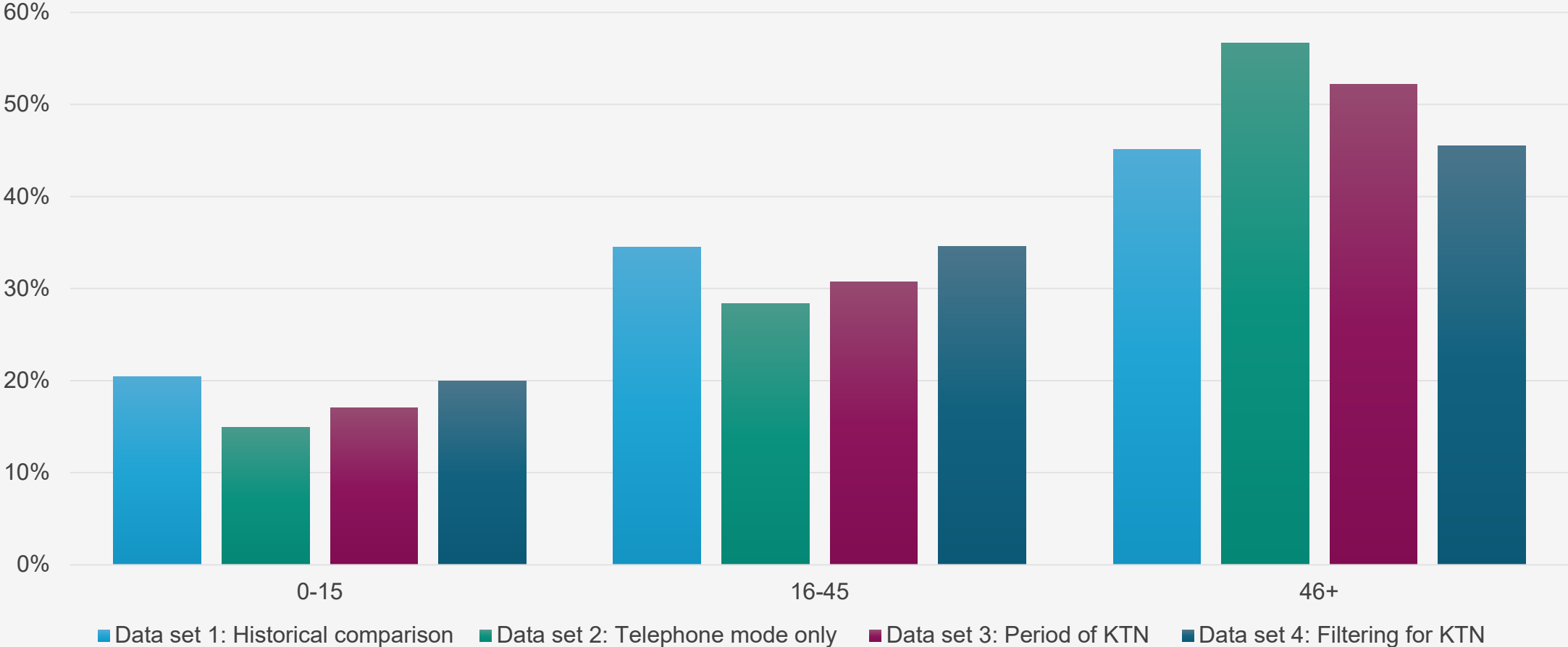
Average RR per type of contact

	Proportion of contacts	Average RR
KTN	55%	37%
Portal cases	13%	80%
Tele-matched	7%	38%
Other non-KTN	6%	62%

Proportional Distribution -Tenure

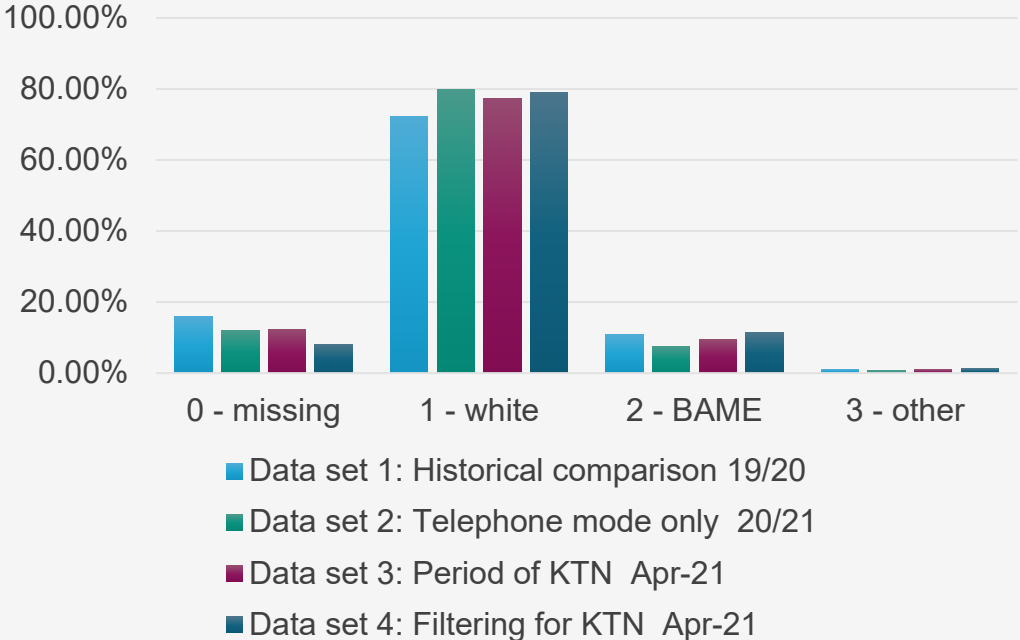


Proportional Distribution - Age

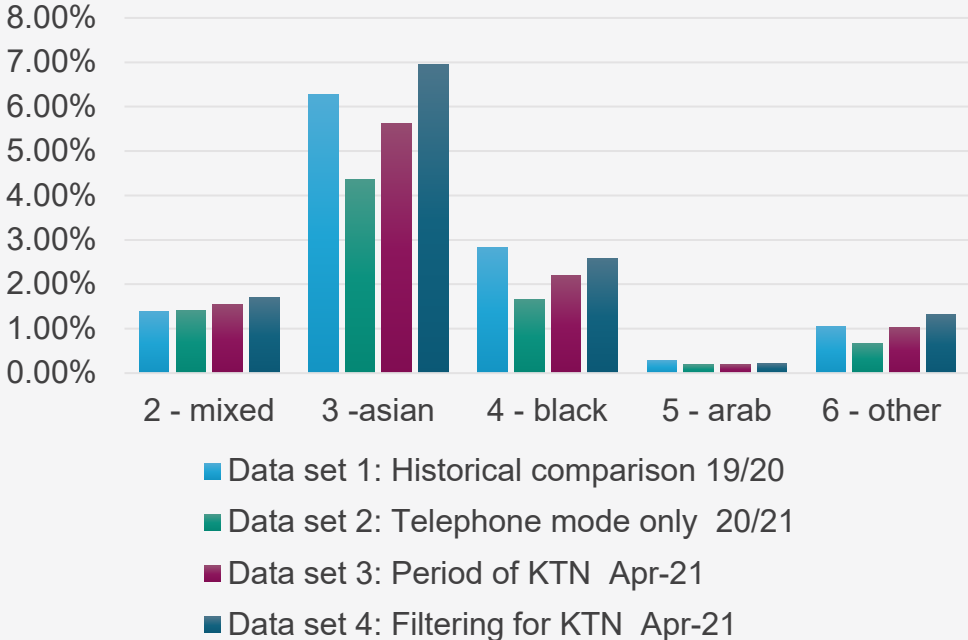


Proportional Distribution - Ethnicity

Clustered Distribution



BAME Distribution



Tenure weight adjustment

- Changes in distribution across several characteristics observed
- Tenure was of particular concern as usually no drastic changes observed over time
- Mode change and strategies to obtain phone numbers prior to introduction of KtN had an impact on non-response bias
- Introduction of tenure as additional calibration constraint in weighting methodology to address non-response bias
- Further details on methodology and impact on estimates are published on [ONS website](#).

Population growth adjustment (1)

- Population estimates used to gross up our weights predate the pandemic and don't show us demographic/structural changes
- Profile of responders has changed due to mode change
- HMRC Real Time Information (RTI/tax data) showed smaller falls in unemployment by non-UK nationals that LFS suggested
- RTI data limited – does not include self-employed, and those not in employment
- RTI data used to obtain estimates for EU and non-EU sub-population

Population growth adjustment (2)

- Method is based on two main assumptions:
 - change in population growth rate of the non-UK sub-populations is in the same direction as the change in their RTI employee growth rate
 - the magnitude of change in population growth rate does not exceed that of change in RTI employee growth rate
- Method involves adjusting the known population growth rate of a base period before the pandemic with the change in RTI employee growth rates adjusted by a specified factor
- Link to [methodology](#)
- Link to [impact on estimates](#)

Any questions?

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